Note - francisco wants to be a contributor - ask everyone else And babarlelephant Authors:

Contributors:

@Engineer2The, @Byron\_Wan, @WhereIsYanLing, @franciscodeasis, @RdeMaistre, @gdemaneuf, @drinkwater5reed, @BillyBostickson, @CharlesRixey, @TheTropaion and Wilson Edwards

# Note:

- please add references for the information I have pasted in the case profiles under the references heading just URLs or hyperlinks there ideally
- Please add raw case information that is case specific, like medical records etc under the 'additional info bit'
- Maybe don't bother with discussion yet unless there are some key things to discuss
- Anything important but not specific to an individual case, stick it right at the end of the document - e.g info about the pharmacy or hotel. This way several cases can have hyperlinks to reference it

### Some considerations:

- dates could have 1 day of discrepancy due to time zones
- ages could have 1 year of discrepancy due to reference day/year used or Chinese vs birthdate
- some names may be pseudonyms though we have tried to identify which are real

# Glossary of abbreviations

CN-WHO China-WHO joint report (v1, were are still waiting for the v2 with a few

corrections)

ICU JYT the RaTG13 paper in ICU numbering WIV the RaTG13 paper in WIV numbering

IPBCAMS-WH- the IPBCAMS paper which includes Vision medical's first sequencing

HBCDC-HB- the Hubei CDC paper WH BGI, paper with IVDC

IME-WH Beijing Institute of Microbiology and Epidemiology, no paper

IVDC China CDC paper

WH190 raw reads and few sequences on NMDC, a IVDC BIG and BGI paper,

another one by Shen. Some WH190 appear under a different name in Lili

Ren's IPBCAMS paper (she uploaded the raw reads to NMDC).

WHU Wuhan university and Zhongnan hospital paper

Other -

Genbank Best sequence database (ncbi)

GISAID Largest SARS-CoV-2 sequence database

GW Genome Warehouse, an hosting sever on referenced on

https://ngdc.cncb.ac.cn/gwh/

NMDC Chinese hosting server

CNGB Chinese sever referencing others

BioProject Agglomerates biosamples (metadata information about sequences or raw

reads)

SRP/CRA -

SRR/CRR Raw reads (SRR is on ncbi and CRR on nmdc)

SAM Biosample

1st 27 JYT Mostly the id in thepaper's overlay, plus some guesses for the missing ones. The assumption is that thepaper's overlay (27 patients) are the 27 cases announced on Dec 31.

2nd 41 JYT Same plus more guesses for the 41 patients of Huang et al.

Wuhan and Jianghan CDC appear sometimes in the authors and in the WHO report timeline and in several anecdotal sources: they drove the investigations during the last few days of December (going to hospitals, taking samples, going to the market)

# Short introduction

The earliest patients from the market are, by onset

57F (Dec 10) 69M1 (Dec 12) 49M (Dec 12) 43M (hospitalized on Dec 14) 65M (Dec 12), 44M2 a suspected case who died in early January,

Also worth to mention the owner of stall 5th 15,17, three positive environmental samples, one is said to be lineage A.

### Outside the market

62M (Dec 12 but whose onset date may be suspicious, he is lineage A) and 41M1 (Dec 16 or Dec 8)

48F (Dec 10) who died in late January and whose link to the market is unknown.

None of these cases are apparently linked to the game business, not even to poultry or meat. They are also somewhat randomly distributed on the West part of the market.

# DRASTIC001

 Age&Sex
 01U

 Chinese name
 XXX

 Name
 XX X

 Type
 Suspected

 Wet market

 Onset
 2019-12-26

 1st Admission
 2019-12-27

 Discharged
 2019-12-31

Death N

Hospital Dec 31st Hospital in Wuhan

 Lineage

 Cluster
 Chan

 1st 27 JYT

 2nd 41 JYT
 X

 CN-WHO

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

 WH

 IME-WH

 IVDC

 WH190

```
WHU
Other
Genbank
GISAID
GW
NMDC
CNGB
BioProject
SRP/CRA
SRR/CRR
SAM
                   HKU-SZ (University of Hong Kong Shenzhen Hospital) family relative 1
Notes
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
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2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
                   Hospital in Wuhan
2019-12-28
                   Hospital in Wuhan
2019-12-29
                   Hospital in Wuhan
2019-12-30
                   Hospital in Wuhan
2019-12-31
                   Hospital in Wuhan
2020-01-01
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2020-01-02
2020-01-03
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2020-01-24
2020-01-25
2020-01-26
2020-01-27
2020-01-28
2020-01-29
2020-01-30
2020-01-31
check
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## Linked cases:

# References for the above summary:

https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7067204/

The index patient in the HKU Jan 24 paper on Shenzhen first patients. https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7159286/

This is a 1 year-old infant hospitalized in Wuhan for pneumonia.

The Shenzhen family visited him at the hospital (on Dec 29) and latter had covid after returning to Shenzhen (onset on Jan 1-Jan 4, sequenced as HKU-SZ-00x, lineage A + C29095T, collection date Jan 10-11)

01U is only a suspected case, the Shenzhen family may have been infected at hospital by another patient, or even somewhere else in Wuhan.

## Additional information about this case:

## Discussion of this case:

# DRASTIC002

 Age&Sex
 21F

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

Wet market Visitor (WHO) contact with a vendor on Dec 22 (Zhongnan paper and

doctor story)

 Onset
 2019-12-26

 1st Admission
 2019-12-28

 Discharged
 2020-01-11

Death N

Hospital Dec 31st Zhongnan

Lineage

Cluster

1st 27 JYT 2nd 41 JYT 28 CN-WHO S09 ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH WH03

IME-WH **IVDC** WH190

WHU02 WHU

Other

LR757996, MN988669 Genbank

EPI\_ISL\_406717, EPI\_ISL\_406800 **GISAID** 

GW

NMDC NMDC60013002-03

**CNGB** CNA0007334

BioProject CNP0000881, PRJEB36487, PRJNA601736, PRJCA008874

SRP/CRA SRP242226, CRA006587

SRR/CRR SRR10903401, CRR456598 to CRR456601

SAM CNS0191794, SAMEA6507892, SAMN13872787, SAMC703648

Notes

2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18

2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	Zhongnar
2019-12-29	Zhongnar
2019-12-30	Zhongnar
2019-12-31	Zhongnar
2020-01-01	Zhongnar
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	Jinyintan
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-

check	-

Linked cases:

References for the above summary:

## **CN-WHO Report**

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
	MN988669	Visitor		22 Dec	1 Jan	0	L/B
S09	EPI_ISL_40 6800	Visitor		22 Dec	2 Jan	0	L/B

This confirms that she is the Zhongnan 21F patient, so that Gisaid collecting lab "PLA hospital" is wrong.

RNA based mNGS approach identifies a novel human coronavirus from two individual pneumonia cases in 2019 Wuhan outbreak

https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7033720/

Patient 2 was a 21-year-old female who developed an intermittent febrile cough, chills, fever (up to 40°C), and frothy white sputum after having a contact with Huanan Seafood Market staff on 22nd December 2019. She was admitted on 28th December after unsuccessful outpatient treatment.

https://ngdc.cncb.ac.cn/ncov/genome/accession?q=CNA0007334

The patient had visited to the seafood wholesale market

(same mention in WH01 and WH02)

### Additional information about this case:

Up to a small expected offset (due to campling and <u>obfuscation of Chinese GPS data</u>) the Wuhan/WH03 BGI biosample coordinate in <a href="https://www.ebi.ac.uk/biosamples/samples/SAMEA6507892">https://www.ebi.ac.uk/biosamples/samples/SAMEA6507892</a>

locates her at Zhongnan confirming that she is the same patient as in the Zhongnan paper's 21F. It locates Wuhan/WH04 (39M) at PLA, Wuhan/WH01 (44M) and Wuhan/WH02 (43M) near Union..

https://matters.news/@Trojanwar123/41985-

%E8%BD%AC%E8%BD%BD%E5%88%A0%E6%96%87-

%E6%AD%A6%E6%B1%89%E7%96%AB%E6%83%85%E4%B8%AD%E7%9A%84%E4%B8

%AD%E5%8D%97%E5%8C%BB%E9%99%A2-

%E4%BB%96%E4%BB%AC%E6%89%93%E6%BB%A1%E5%85%A8%E5%9C%BA-

bafyreicljzg7xsrgy5tekp7xdvfy5ogg2mbfi2jkpmltfamuz3majgu634

the other had no history of direct contact with the Huanan Seafood Market. , but some vendors in the Huanan Seafood Market have visited his house.

The whole genome sequence of the new coronavirus was determined on January 2, 2020, and uploaded to GISAID on January 11; January 3, 2020, BGI has completed high-depth full-gene sequence sequencing of the three virus samples obtained from two hospitals in Wuhan at the end of December 2019;

On January 1, 2020, the Department of Respiratory Medicine of Zhongnan Hospital sampled bronchoalveolar lavage fluid from two suspected patients. Bronchoalveolar lavage is a treatment that removes inflammatory secretions from the alveoli and improves respiratory function. For lower respiratory tract and lung diseases, bronchoalveolar lavage fluid contains more pathogens than throat swabs. Professor Cheng Zhenshun, director of the Respiratory Department, told Caixin reporters that they sent the samples to the third-party testing agency Wuhan Huada Medical Laboratory for gene sequencing on the same day, hoping to use the high-throughput gene sequencing technology of Huada Gene to find the pathogen. Wuhan Huada Medical Laboratory is a wholly-owned subsidiary of Shenzhen Huada Gene Co., Ltd.

On January 2, Cheng Zhenshun received a call from BGI and verbally informed him that a new coronavirus had been found, with close to 80% homology to the SARS gene sequence.

## Discussion of this case:

Would be interesting to check WH03, the 21y old female whose file was created on the 10th Dec 19 by the PLA hospital of central military command. - gilles

For this see

 $\frac{https://twitter.com/flodebarre/status/1512922773940809731?s=20\&t=UGvfh57r36Gzle3LhL}{mPgg}$ 

# DRASTIC003 "XIAO LI" The first recovery

Age&Sex 23M
Chinese name 李XX
Name XX Li
Type Positive
Wet market N

Onset 2019-12-24 1st Admission 2019-12-25 Discharged 2020-01-15

Death Hospital Dec 31st Clinic Lineage Cluster 1st 27 JYT 2nd 41 JYT 28 CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other

Genbank **GISAID** GW **NMDC CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 Hospital outpatient 2019-12-25 2019-12-26 Hospital outpatient 2019-12-27 Hospital outpatient 2019-12-28 Home 2019-12-29 Home Clinic 2019-12-30 2019-12-31 Clinic 2020-01-01 Union 2020-01-02 Jinyintan Jinyintan (ICU) 2020-01-03

2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	Jinyintan
2020-01-12	Jinyintan
2020-01-13	Jinyintan
2020-01-14	Jinyintan
2020-01-15	Jinyintan
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

# References for the above summary:

## https://news.dayoo.com/gzrbrmt/202001/22/158541 53043215.htm

On the 21st, Wang Kang, who had been diagnosed with a new type of coronavirus pneumonia, was discharged from the hospital. From the feeling of discomfort on December 24, 2019, until he was cured and discharged from the hospital on January 15, he experienced two hospital transfers,

and his blood oxygen level was once in a dangerous state. He was finally diagnosed and treated in Wuhan Jinyintan Hospital.

I'm only 23,

On Jan 2...

At about 7:00 pm, Jinyintan Hospital drove an ambulance to pick me up

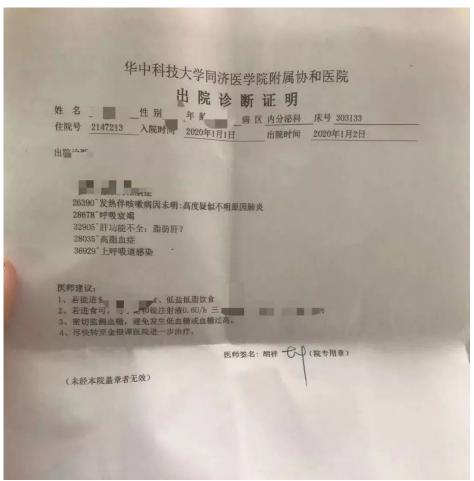
. . .

# Additional information about this case:



Li Wang Kang or whatever is a pseudonym

Diagnosis certificate issued by Xiehe (Union) Hospital



https://mega.nz/file/W3hGwaia#328x5gP1cpXC5NhWReenDohCx1XuNnGcKDOUGAOg978 https://mega.nz/file/D6gwjYKQ#ApYiEKe5Y21xylCwXE9abBgfglt0QUa5O4\_4sEp8tfo https://mega.nz/file/TmoBmlRa#Ei31xp2Knm-PCFMa\_9453M60uwY6GcEO5SVcrwsq1go

He is also mentioned in https://mp.weixin.qq.com/s/xuf8nn1OPOY51cyZMduQ-Q

he is only 23 years old. Xiao Wu is from Huangpi and works in sales near Hankou Railway Station, which is very close to the place he rented. He commutes to get off work by bicycle every day, and he has never been to the seafood market before

Long interview (transcript?) in https://mp.weixin.qq.com/s/Ps5lUon8LMCxLrPGwqKjMg

### Let's translate it?

https://web.archive.org/web/20210815232812if /https://m.weibo.cn/detail/4463633373834748

Xiao Li 23M, I went to the National Hospital on the 25th as a cold treatment. 23-year-old Xiao Li was the first to be cured. He recovered and was discharged from the hospital on January 15 - posted jan 22, 2020

https://www.bilibili.com/video/av84492923?fromvsogou=1&bsource=sogou&fr=seo.bilibili.com

https://mega.nz/file/TmoBmlRa#Ei31xp2Knm-PCFMa 9453M60uwY6GcEO5SVcrwsq1go

https://www.thepaper.cn/newsDetail forward 5600508

https://web.archive.org/web/20210822181615/https://www.thepaper.cn/newsDetail\_forward\_560\_0508

https://archive.md/M12Lh

M23 - Onset Dec 24 - 小李 (poor translation - Xiao Li)

Wang Kang(not real name - real name is in video): My job is to do sales near Hankou Railway Station, which is only a few hundred meters away from the South China Seafood Market, but I have never been to the seafood market. I visited the South China Fruit Market on December 22, 2019. It rained a little that day, and I thought it was a cold.

https://www.sohu.com/a/368323366\_419342 https://archive.ph/TdFBW

It was found that Mr. Li was working at Hankou Railway Station, which was only a few hundred meters away from the Huanan Seafood Market in Wuhan, which was closely related to the epidemic.

He is called 刘杰 (Liu Je) in

https://baijiahao.baidu.com/s?id=1654845412197587426&wfr=spider&for=pc

# Discussion of this case:

# DRASTIC004

Age&Sex 25F Chinese name XXXXXXName Type Positive Wet market No

Onset 2019-12-24

1st Admission Discharged Death Hospital Dec 31st Lineage Cluster Li 4.3 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other

Genbank

GISAID	-
GW	-
NMDC	-
CNGB	-
BioProject	-
SRP/CRA	-
SRR/CRR	-
SAM	-
Notes	
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
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2019-12-06	-
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2019-12-30	_
2019-12-31	_
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2020-0 1-0 <del>1</del>	_

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2020-01-31
check
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## Linked cases:

DRASTIC033 DRASTIC035

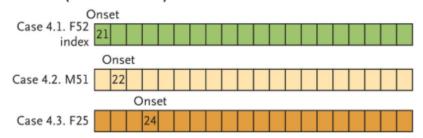
References for the above summary:

Additional information about this case:

Li et al (2020)

## https://www.nejm.org/doi/full/10.1056/nejmoa2001316

## Cluster 4 (December 2019)



Discussion of this case:

# DRASTIC006

 Age&Sex
 31F

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 Exposure to 61M

Onset Exposure to 61

 1st Admission

 Discharged

 Death

 Hospital Dec 31st

 Lineage

 Cluster
 Li 1.3

 1st 27 JYT

 2nd 41 JYT

 CN-WHO

WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC CNGB **BioProject** SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24

**ICU JYT** 

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2019-12-25
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2020-01-23
2020-01-24
2020-01-25
2020-01-26
2020-01-27
2020-01-28
2020-01-29
2020-01-30
2020-01-31
check
```

Linked cases:

## DRASTIC038 DRASTIC043

# References for the above summary:

Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

# Additional information about this case:

Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

# Cluster 1 (December 2019)



Discussion of this case:

# DRASTIC007

Age&Sex 31M
Chinese name 李力
Name Li Li
Type Positive
Wet market Vendor
Onset 2019-12-21
1st Admission 2019-12-28

Discharged Death Hospital Dec 31st Lineage Cluster 1st 27 JYT 12 2nd 41 JYT 12 CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04

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2019-12-05
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                   Central
2019-12-29
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2020-01-17
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2020-01-18 2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

#### Linked cases:

DRATIC031 51M selling turtles and next to him in thepaper's overlay.

### References for the above summary:

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
12	江岸区	男31	售卖甲鱼
	Jiang'an	Male	Selling turtle

From the Wuhan-Hu-1 preprint he was hospitalized in Central hospital (Houhu district) https://www.biorxiv.org/content/10.1101/2020.01.24.919183v2.full.pdf

Characteristic	Patient 5
Age (Year)	31
Sex	M
Date of illness onset	Dec 21,2019
Date of admission	Dec 28,2019
Fever	+
Body Temperature (°C)	38.7
Cough	+
Sputum Production	-
Dizzy	-
Weakness	-
Chest tightness	+
Dyspnea	+
Bacterial culture	
Gluco corticoid therapy	Yes
Antibiotic therapy	Cefminox
Antiviral therapy	Oseltamivir, ganciclovir
Oxygen therapy	No

The "First Level reponse" movie around 9:30 <a href="http://cov2.free.fr/Covid-FirstLevelResponse/">http://cov2.free.fr/Covid-FirstLevelResponse/</a>

Dai Hong Jun says he went to Central hospital.

Li Li says his onset was on Dec 20.

The narrator says they work together and sell turtles.

Thepaper's overlay includes two 31M and 51M turtle sellers.

In the Wuhan-Hu-1 preprint on Central hospital patients there are a 31M (onset Dec 21) and a 51M (onset Dec 26).



Additional information about this case:

# Discussion of this case:

Note from Francisco
IVDC-HB-05 identical to WH19005

# DRASTIC008 bis

Age&Sex 32M2 1st Admission 2019-12-27 IVDC IVDC-HB-05 WH190 WH19005

NMDC NMDC60013086-01 NMDC60013002-10

Gisaid EPI\_ISL\_402121 SAM SAMC703641? CRR CRR456568?

IVDC-HB-05 and WH19005 were assigned to 49F for no obvious reason, so I moved them here.

#### Edit:

https://ngdc.cncb.ac.cn/gsa/browse/CRA006587/CRR456568

https://ngdc.cncb.ac.cn/biosample/browse/SAMC703641 says that WH19001

(49F according to <a href="https://www.ncbi.nlm.nih.gov/biosample/?term=WH19001">https://www.ncbi.nlm.nih.gov/biosample/?term=WH19001</a> ) and WH19005 are the same biosample.

But IVDC-HB-05 is said to be 32M in the IVDC paper, IVDC-HB-01 is said to be 49F.

#### The raw reads of WH19001

https://trace.ncbi.nlm.nih.gov/Traces/sra/?path=https%3A%2F%2Fsra-pub-sars-cov2.s3.amazonaws.com%2Frun%2FSRR11059947%2FSRR11059947&run=SRR11059947&acc=MN908947.3&ref=MN908947.3&range=20670%3A20700&src=0&output=fasta&output\_to=Screen

Don't contain the two mutations G20670A and G20679A

The raw reads <a href="https://ngdc.cncb.ac.cn/gsa/browse/CRA006587/CRR456568">https://ngdc.cncb.ac.cn/gsa/browse/CRA006587/CRR456568</a>

Assembled by  $\underline{\text{https://github.com/niemasd/PRJCA008874-Analysis}} \text{ do contain the two mutations.}$ 

### https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159086/

Notably, the sequence identity between the two virus genomes from the same patient (WH19001, from bronchoalveolar lavage fluid, and WH19005, from cell culture) was more than 99·99%, with 100% identity at the amino acid level.

### Placeholder for two identical sequences,

IVDC-HB-05 is said to be 32M admitted on Dec27

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013086-01

WH19005 age&sex is not indicated, and it is said to have onset on Dec23 and admitted on Dec29 and to be marked-related

https://ngdc.cncb.ac.cn/ncov/genome/accession/?g=NMDC60013002-10

Same metadata as for WH19001

https://ngdc.cncb.ac.cn/ncov/genome/accession?q=NMDC60013002-08 but different sequence

And different to the 32M1 sequences IVDC-HB-GX02, WIV02 and so on

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7092803/

### On IVDC-HB-05: 32M,

Three adult patients presented with severe pneumonia and were admitted to a hospital in Wuhan on December 27, 2019.

Patients 1 and 3 recovered and were discharged from the hospital on January 16, 2020.

Dingyu Zhang (Jinyintan) is 2nd author.

### May it be 31M?

# DRASTIC008

 Age&Sex
 32M1

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 Trader

 Onset
 2019-12-19

 1st Admission
 2019-12-29

Discharged Death N
Hospital Dec 31st Jinyintan
Lineage B

Cluster CN-WHO 2.2

 1st 27 JYT
 1

 2nd 41 JYT
 1

 CN-WHO
 \$04

 ICU JYT
 ICU-04

 WIV
 WIV02

IPBCAMS-WH- -

HBCDC-HB-02/2019 (WHO), HBCDC-HB-04/2019 (based on what?)

WH -

IME-WH IME-WH03 (mix-up in the WHO report which says IME-WH02)

IVDC IVDC-HB-GX02 WH190 WH19008

WHU -Other -

Genbank MN996527, MT291827

GISAID EPI\_ISL\_402127, EPI\_ISL\_412898, EPI\_ISL\_412900, EPI\_ISL\_434534,

EPI\_ISL\_529214

GW GWHABKK00000000 NMDC NMDC60013002-06

```
BioProject
                   PRJCA002163, PRJNA605983, PRJNA616446
SRP/CRA
                   CRA002423, SRP249613, SRP254688
SRR/CRR
                   CRR122276, CRR122280, CRR122281, SRR11092058, SRR11092063,
SRR11454612, SRR11454615
                   SAMC133236, SAMN14082196, SAMN14479127, SAMN14479130
SAM
Notes
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
2019-12-14
2019-12-15
2019-12-16
                   - ONSET IF WANG FROM ARTICLE
2019-12-17
2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
2019-12-24
                   Visit a doctor
2019-12-25
2019-12-26
2019-12-27
2019-12-28
2019-12-29
                   Jinyintan
2019-12-30
                   Jinyintan
                   Jinyintan
2019-12-31
2020-01-01
                   Jinyintan
2020-01-02
                   Jinyintan
2020-01-03
                   Jinyintan
2020-01-04
                   Jinyintan
2020-01-05
                   Jinyintan
2020-01-06
                   Jinyintan
```

**CNGB** 

2020-01-07	Jinyintan
2020-01-08	Jinyintar
2020-01-09	Jinyintar
2020-01-10	Jinyintar
2020-01-11	Jinyintar
2020-01-12	Jinyintan
2020-01-13	Jinyintan
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

## Linked cases:

DRASTIC014 and DRASTIC076 Same stall, second cluster of CN-WHO report

# References for the above summary:

HBCDC-HB-04/2019 is very different, it has 8 mutations, and none of the 21316 24325 mutations, no reason to assume that it is the same patient.

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013092-01 https://nmdc.cn/resource/ncov/genome/detail/NMDC60013092-01

### https://ngdc.cncb.ac.cn/biosample/browse/insdc/SAMN14479130

### https://www.nature.com/articles/s41586-020-2012-7/tables/1

		Firs	t sampling-20	19.12.30	Second sampling-2020.01.10			
Patient No.	Test No.	BALF	Oral Swab	Blood (Ab)	Oral Swab	Anal Swab	Blood (PCR)	Blood (Ab)
ICU-01	WIV01	-	Ct=32.0	NA	NA	NA	NA	NA
ICU-04	WIV02#	Ct=17.6	Ct = 26.6	NA	-	-	8	+
ICU-05	WIV03	Ct=27.0	Ct = 31.9	NA	-	-	-	+
ICU-06	WIV04#*	Ct=18.3	Ct=27.7	+	-	-		+
ICU-08	WIV05#	Ct = 24.1	-	NA	NA	NA	NA	NA
ICU-09	WIV06#	Ct=21.6	Ct = 29.4	NA	-	-	-	+
ICU-10	WIV07#	Ct=25.7	Ct=24.0	NA			-	+

## https://www.nature.com/articles/s41586-020-2012-7/tables/2

Patient No.	Gender	Age	Date of Onset	Date of Admission	Symptoms When Admitted	Current Status (2020.01.13)	Diagnosis history
ICU-01*	Male	62	2019.12.12	2019.12.27	fever	recover, discharged	negative
ICU-04	Male	32	2019.12.19	2019.12.29	fever, cough, dyspnea	fever, intermittent cough	negative
ICU-05	Male	40	2019.12.17	2019.12.27	fever (38 °C), expectoration, malaise, dyspnea	fever, malaise, intermittent cough	AdV (IgM)
ICU-06	Female	49	2019.12.23	2019.12.27	fever (37.9 °C), palpitation	fever, malaise, cough	Coronavirus (nt)
ICU-08	Female	52	2019.12.22	2019.12.29	fever (38.5 °C), expectoration, malaise, dyspnea	recover, discharged	Streptococcus pneumoniae (nt)
ICU-09	Male	40	2019.12.22	2019.12.28	fever (38.5 °C), expectoration	fever (38.5 °C), malaise, expectoration, dizziness	negative
ICII-10	Male	56	2019 12 20	2019 12 20	fever dyspnea chest tightness	fever malaise cough dyspnea	negative

### IVDC-GX-02, 32M

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=EPI\_ISL\_434534

WH19008 admitted on Dec29

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013002-06

WIV02 as in the table

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=GWHABKK00000001

Mentions the market, but unspecific (same mentions for other WIV0x sequences)

HBCDC-HB-02/2019 is identical to WH19008, both matched with WIV02 in the WHO report

## **CN-WHO Report**

From China-WHO report, Chinese part, Table 7 page 72:

	iple D	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
St	)4	NMDC6001 3002-06	Vendor	Frozen goods	19 Dec	30 Dec	24325 (S) <sup>b</sup>	L/B

And p.74

		2019/12/30	BetaCoV/Wuhan/W H19008/2019	24325	24325	NGS	6720	0.01
		2019/12/30	WIV02	21316, 24325	21316, 24325	Illumina MiSeq, MGISEQ 2000	35	0.01
S04	2019/12/19	2019/12/30	SARS-CoV- 2/Wuhan_IME- WH02/human/2019/ CHN	//	//	Ion Torrent X5Plus	149	0.56
		2019/12/30	BetaCoV/Wuhan/HB CDC-HB-02/2019	24325	24325	Illumina MiSeq	475	0.01
		2019/12/30	hCoV- 19/Wuhan/IVDC- HB-GX02/2019	24325	NA	Sanger dideoxy sequencing		

It is probably a mix-up, IME-WH02 exchanged with IME-WH03.

- The sequences IME-WH02 and WIV06 are identical to Wuhan-Hu-1
- The sequences IVDC-GX02 (32M) WH19008 (NA) IME-WH03 (NA) HBCDC-HB-02 (NA) are identical, with one more mutation (A23425G) than Wuhan-Hu-1.

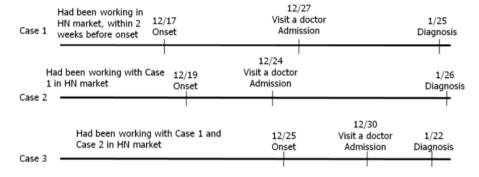
WIV02 (32M) has one additional mutation.

WH19003 (40M) has two additional mutations, which makes sense as according to the WHO annexes a 40M is part of the same cluster.

The Gisaid entry for HBCDC-HB-02 mentions male, "traveled from Wuhan" <a href="https://drquay.com/wp-content/uploads/2021/01/SQuay\_Bayesian-Analysis-of-SARS-CoV-2-FINAL-01.27.2021.pdf">https://drquay.com/wp-content/uploads/2021/01/SQuay\_Bayesian-Analysis-of-SARS-CoV-2-FINAL-01.27.2021.pdf</a>

## Cluster 2 of China-WHO report annexes

Cluster 2: there were 3 confirmed cases, all of whom were traders of the same stall in Huanan Market. Stall employee one, 40 years old, fell ill on 17 December 2019; stall employee two, 32 years old, fell ill on 19 December 2019; stall employee three, 57 years old, fell ill on 25 December 2019. It was a fixed stall in Huanan Market, dealing in frozen products such as pastry and soy products. Employee two was purchasing goods from the Baishazhou market and Huanan Market back and forth. Employee three was delivering goods in Huanan Market.



Possible sources of infection: employee one might be infected from environmental exposure in Huanan Market, employee two and employee three might be infected from market environmental exposure or human to human transmission

The onsets and N=3 description of WHO cluster 2 and the Fig.25 of the WHO report mean that the stall is likely thisone

ttps://aiqicha.baidu.com/company\_detail\_16131223666317 West 13th X2, 15th X1 in 2007 https://aiqicha.baidu.com/company\_detail\_11227908159172 West 13th X2 established in 2018

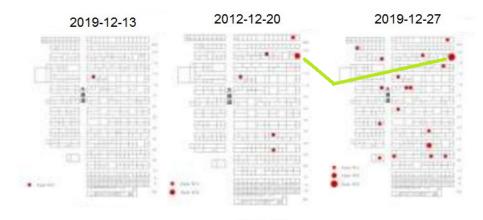


Fig. 25. Spatial distribution of vendor cases associated with the Huanan market by week of onset.

### Additional information about this case:

### From Francisco

Francisco

5:24 AM Sep 4

Less than 24h in Integrated.

Could be a relative that was transerred despite not being formally a patient in Integrated. In fact, he works in the same stall as 40M1

From babar: I'm not convinced by Francisco's claim that 32M1 is among the 4/7 market related patients of Zhang Jixian.

Zhang Jixian said once that "the 4 patients knew each other, all coming from the market" but this is very ambiguous if they knew each other or only had the same workplace.

She should have mentioned it more precisely if two worked in the same stall, that's the kind of thing you notice in an hospital when two of your patients are boss and employee.

SRR11454612 has apparently no variants of the 3 mutations of WA1.

- half G12106 & A12106 (Wuhan-Hu-1)
- G24325

## Discussion of this case:

# DRASTIC009 son of 62M/62F

Age&Sex 35M Chinese name 张强

Name Qiang Zhang Type Positive Wet market No Onset 2019-12-27

 Onset
 2019-12-27

 1st Admission
 2019-12-27

 Discharged
 2020-01-07

Death N

Hospital Dec 31st Integrated

Lineage -

Cluster Xinhua 1.3

1st 27 JYT X 2nd 41 JYT X

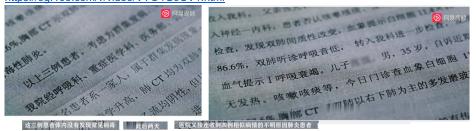
**CN-WHO** ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23

2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	Integrated
2019-12-28	Integrated
2019-12-29	Integrated
2019-12-30	Integrated
2019-12-31	Integrated
2020-01-01	Integrated
2020-01-02	Integrated
2020-01-03	Integrated
2020-01-04	Integrated
2020-01-05	Integrated
2020-01-06	Integrated
2020-01-07	Integrated
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

#### References for the above summary:

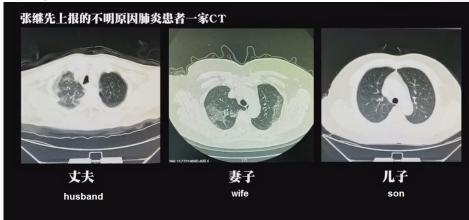
Renamed from 32M2 to 35M due to this excerpt in this video <a href="https://3g.163.com/v/video/VYO4G9UV1.html">https://3g.163.com/v/video/VYO4G9UV1.html</a>



32M was guessy, see the section 'Cases from Interview with Zhang Jixian from Hubei Provincial Hospital of Integrated Chinese & Western Medicine'

Additional information about this case:

The CT scan of the family, from the same video <a href="https://3g.163.com/v/video/VYO4G9UV1.html">https://3g.163.com/v/video/VYO4G9UV1.html</a>



Discussion of this case:

# DRASTIC011

Age&Sex 34F
Chinese name XXX
Name XX X

Type False positive

Wet market -

Onset 2019-12-02

1st Admission

Discharged 2020-02-15

Death Ν Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB- $\mathsf{WH}$ IME-WH IVDC WH190 WHU Other Genbank **GISAID** 

GW

NMDC	-
CNGB	-
BioProject	-
SRP/CRA	-
SRR/CRR	-
SAM	-
Notes	-
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
2019-12-05	-
2019-12-06	-
2019-12-07	-
2019-12-08	-
2019-12-09	-
2019-12-10	-
2019-12-11	-
2019-12-12	-
2019-12-13	-
2019-12-14	-
2019-12-15	-
2019-12-16	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
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2020-01-05	-
2020-01-06	-

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Linked cases:

References for the above summary:

Additional information about this case:

Discussion of this case:

# DRASTIC012

Age&Sex 39M1 Chinese name XXX Name XXXТуре Positive Wet market Vendor Onset 2019-12-20 1st Admission 2019-12-25 Discharged 2020-01-12

Death N

Hospital Dec 31st Zhongnan

 Lineage
 B

 Cluster

 1st 27 JYT

 2nd 41 JYT
 28

 CN-WHO
 S07

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

 WH

 IME-WH

 IVDC

 WH190

WHU WHU01

Other -

Genbank MN988668
GISAID EPI\_ISL\_406716

GW -NMDC -CNGB -

BioProject PRJNA601736

CDD/CDA	CDD040006
SRP/CRA SRR/CRR	SRP242226 SRR10903402
SAM	SAMN13872786
Notes	SAIVIN 13012100
2019-12-01	
2019-12-01	-
2019-12-02	-
2019-12-03	
2019-12-04	
2019-12-06	_
2019-12-07	_
2019-12-08	_
2019-12-09	_
2019-12-10	_
2019-12-11	-
2019-12-12	-
2019-12-13	-
2019-12-14	-
2019-12-15	-
2019-12-16	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	Zhongnan
2019-12-26	Zhongnan
2019-12-27	Zhongnan
2019-12-28	Zhongnan
2019-12-29	Zhongnan
2019-12-30	Zhongnan
2019-12-31	Zhongnan
2020-01-01	Zhongnan
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan

2020-01-09

Jinyintan

2020-01-10	Jinyintar
2020-01-11	Jinyintar
2020-01-12	Jinyintar
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

# References for the above summary:

# CN-WHO Report

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
S07	MN988668	Vendor	Seafood	20 Dec	2 Jan	0	L/B

RNA based mNGS approach identifies a novel human coronavirus from two individual pneumonia cases in 2019 Wuhan outbreak

https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7033720/

On 2nd January 2020, samples were collected from two unusual pneumonia patients from Zhongnan Hospital of Wuhan University. Patient 1 was a 39-year-old male staff at Huanan Seafood Market who experienced fever (up to 37.7°C) and aggravated cough with frothy white sputum for 5 days before admitted to the hospital on 25th December 2019.

Additional information about this case:

Discussion of this case:

39M2 has a different onset and is lineage A, so it must be two distinct patients.

# DRASTIC013

Age&Sex 39M2
Chinese name XXX
Name XX X
Type Positive

Wet market Hotel near the market from Dec 23 to Dec 27

Onset 2019-12-27

1st Admission Discharged Death Hospital Dec 31st Lineage A
Cluster
1st 27 JYT -

2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WHHBCDC-HB- WH WH04
IME-WH IVDC WH190 -

Genbank LR757995 GISAID EPI\_ISL\_406801

GW -

NMDC NMDC60013002-04 CNGB CNA0007335

BioProject CNP0000881, PRJEB36487, PRJCA008874

SRP/CRA CRA006587

SRR/CRR CRR456602 to CRR456605

SAM CNS0191795, SAMEA6507893, SAMC703649

Notes

WHU Other

2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22

2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	PLA
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11 2020-01-12	-
2020-01-12	-
2020-01-13	-
2020-01-14	_
2020-01-15	_
2020-01-17	_
2020-01-17	_
2020-01-19	_
2020-01-20	_
2020-01-21	_
2020-01-22	_
2020-01-23	_
2020-01-24	_
2020-01-25	_
2020-01-26	_
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

References for the above summary:

https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736%2820%2930251-8.pdf

Additional information about this case:

Discussion of this case:

# DRASTIC079

Age&Sex 39F

Chinese name 的张琴 (pseudonym)

Name Zhang Qin
Type We are not sure
Wet market Worker

Onset 2019-12-21 1st Admission 2019-21-26 Discharged 2020-01-12

Death N

Hospital Dec 31st Tongji - Jinyintan

 Lineage

 Cluster

 1st 27 JYT

 2nd 41 JYT

 CN-WHO

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

 WH

**IVDC** WH190 WHU Other Unpublished sequence, failed run, or not Covid? Genbank GISAID GW **NMDC CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 Integrated Integrated 2019-12-25 2019-12-26 Tongji 2019-12-27 Tongji 2019-12-28 Tongji

IME-WH

2019-12-29

Tongji

2019-12-30 2019-12-31 2020-01-01 2020-01-02 2020-01-03 2020-01-05 2020-01-06 2020-01-07 2020-01-08 2020-01-09 2020-01-10	Tongji Jinyintan
2020-01-10	Jinyintan
2020-01-11	Jinyintan
2020-01-13	-
2020-01-14	_
2020-01-15	_
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

# Linked cases:

### References for the above summary:

This case is said to be confirmed in <a href="https://www.thepaper.cn/newsDetail">https://www.thepaper.cn/newsDetail</a> forward 5649999 <a href="https://www.sohu.com/a/369086461">https://www.sohu.com/a/369086461</a> 260616

But we are not sure because the CT scan and some of the meds are odd. Coroldo insight is

"I believed BGI found three positive. Zhang was not one of them. And Zhang was constantly treated with antibiotics. She might be one of the cases of bocavirus persistent infection + Acinetobacter baumannii conifection. Not necessarily the SC2"

→ no idea where the bocavirus story is from, possibly from one of his unpublished documents

#### https://news.sina.com.cn/o/2020-01-22/doc-iihnzahk5751758.shtml

Zhang Qin (pseudonym), 39,

On December 21, 2019, Zhang Qin, who was working in the Huanan Seafood Market in Wuhan, began to develop symptoms of cough, cold and low-grade fever. At first, Zhang Qin didn't care, and only gave injections in community clinics. Four days later, there was still no improvement, so he was admitted to Hubei Provincial Hospital of Integrated Traditional Chinese and Western Medicine (Hubei Xinhua Hospital) on December 24, 2019, and underwent lung CT and other tests. However, after a day and a half of treatment in Hubei Provincial Hospital of Integrated Traditional Chinese and Western Medicine, Zhang Qin's condition had a tendency to worsen. He began to have symptoms of difficulty in walking, difficulty breathing and asthma as soon as he walked, and he did not have much appetite. Can't eat. Yu Dong realized that the situation was not right, and immediately asked for a transfer. On the evening of December 26, 2019, Zhang Qin and Yu Dong came to Tongji Hospital Affiliated to Tongji Medical College of Huazhong University of Science and Technology (hereinafter referred to as "Tongji Hospital") for emergency and hospitalization.

Zhang Qin started a series of examinations, including an out-of-hospital examination called "NGS detection of pathogenic microorganisms

Transferred to Jinyintan on Dec 31

Before Zhang Qin fell ill, Yu Dong and Zhang Qin both worked in the Huanan Seafood Market, each with a monthly salary of 4,000 yuan. Yu Dong did not disclose what kind of goods his part-time job stall was selling. He said: "It's hard to talk about people working there before."

### DRASTIC014 - Chujun Gao

Age&Sex 40M1 Chinese name 高楚君 Name Chujun Gao Type Positive

Wet market Employee (according to WHO cluster 2), Business owner (according to

who?)

Onset 2019-12-17 1st Admission 2019-12-27

Discharged Death N
Hospital Dec 31st Jinyintan
Lineage B

Cluster CN-WHO 2.1

1st 27 JYT 1
2nd 41 JYT 1
CN-WHO ICU JYT ICU-05
WIV WIV03
IPBCAMS-WH-

IPBCAMS-WHHBCDC-HBWH
IME-WH
IVDC
-

WH190 WH19003

 WHU

 Other

 Genbank

 GISAID

 GW

 NMDC

 CNGB

BioProject PRJCA002202, PRJNA605907

SRP/CRA CRA002334, CRA002475, SRP248092

SRR/CRR CRR116150, CRR125939, CRR125947, SRR11059945

SAM SAMC134551, SAMN14081559

Notes

 2019-12-01

 2019-12-02

 2019-12-03

 2019-12-04

 2019-12-05

 2019-12-06

 2019-12-07

 2019-12-08

 2019-12-09

 2019-12-10

 2019-12-11

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2019-12-12
2019-12-13
2019-12-14
2019-12-15
2019-12-16
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2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
                    Integrated (possibly wrong)
2019-12-28
                    Integrated (possibly wrong)
                    Jinyintan (possibly wrong transfer date)
2019-12-29
2019-12-30
                    Jinyintan
2019-12-31
                    Jinyintan
2020-01-01
                    Jinyintan
2020-01-02
                    Jinyintan
2020-01-03
                    Jinyintan
2020-01-04
                    Jinyintan
2020-01-05
                    Jinyintan
                    Jinyintan
2020-01-06
2020-01-07
                    Jinyintan
2020-01-08
                    Jinyintan
2020-01-09
                    Jinyintan
2020-01-10
                    Jinyintan
2020-01-11
                    Jinyintan
2020-01-12
                    Jinyintan
2020-01-13
                    Jinyintan
2020-01-14
2020-01-15
2020-01-16
2020-01-17
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2020-01-21
2020-01-22
2020-01-23
2020-01-24
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2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

### Linked cases:

<u>DRASTIC008</u> and <u>DRASTIC041</u> same stall second cluster of China - WHO joint report.

# References for the above summary:

The WIV paper <a href="https://www.nature.com/articles/s41586-020-2012-7/tables/1">https://www.nature.com/articles/s41586-020-2012-7/tables/1</a> and <a href="https://www.nature.com/articles/s41586-020-2012-7/tables/2">https://www.nature.com/articles/s41586-020-2012-7/tables/1</a> and <a href="https://www.nature.com/articles/s41586-020-2012-7/tables/2">https://www.nature.com/articles/s41586-020-2012-7/tables/1</a> and <a href="https://www.nature.com/articles/s41586-020-2012-7/tables/2">https://www.nature.com/articles/s41586-020-2012-7/tables/2</a>

Patient No.	Gender	Age	Date of Onset	Date of Admission	Symptoms When Admitted	Current Status (2020.01.13)	Diagnosis history
ICU-01*	Male	62	2019.12.12	2019.12.27	fever	recover, discharged	negative
ICU-04	Male	32	2019.12.19	2019.12.29	fever, cough, dyspnea	fever, intermittent cough	negative
ICU-05	Male	40	2019.12.17	2019.12.27	fever (38 °C), expectoration, malaise, dyspnea	fever, malaise, intermittent cough	AdV (IgM)
ICU-06	Female	49	2019.12.23	2019.12.27	fever (37.9 °C), palpitation	fever, malaise, cough	Coronavirus (nt)
ICU-08	Female	52	2019.12.22	2019.12.29	fever (38.5 °C), expectoration, malaise, dyspnea	recover, discharged	Streptococcus pneumoniae (nt)
ICU-09	Male	40	2019.12.22	2019.12.28	fever (38.5 °C), expectoration	fever (38.5 °C), malaise, expectoration, dizziness	negative
ICU-10	Male	56	2019.12.20	2019.12.20	fever, dyspnea, chest tightness	fever, malaise, cough, dyspnea	negative

WH19003 is a 40M <a href="https://www.ncbi.nlm.nih.gov/biosample/14081559">https://www.ncbi.nlm.nih.gov/biosample/14081559</a> with the A24325G mutation found in 32M.

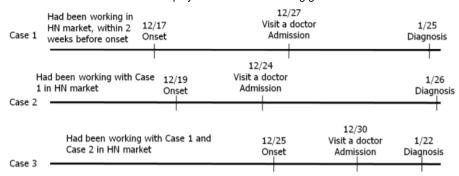
In the paper https://academic.oup.com/cid/article/71/15/713/5780800#supplementary-data

From supplementary table 1, there are two 40M, he is the most severe one, and with earliest onset

0001							
	ID	Gender	Age	Clinical lab	Days after onset	ICU	Outcome
WH19001	nCov1	female	49	Negative	8	N	Recovered
WH19002	nCov2	female	52	Negative	8	Y	Recovered
WH19003	nCov3	male	40	Negative	15	Y	Recovered
WH19004	nCov4	male	61	Negative	12	Y	Deceased
WH19010	nCov5	male	40	Negative	8	N	Recovered
WH19012	nCov6	male	56	Negative	10	Y	Recovered
WH19016	nCov7	female	53	Negative	7	N	Recovered
WH19053	nCov8	male	41	Negative	4	N	Recovered

#### Cluster 2 of China-WHO report annexes

Cluster 2: there were 3 confirmed cases, all of whom were traders of the same stall in Huanan Market. Stall employee one, 40 years old, fell ill on 17 December 2019; stall employee two, 32 years old, fell ill on 19 December 2019; stall employee three, 57 years old, fell ill on 25 December 2019. It was a fixed stall in Huanan Market, dealing in frozen products such as pastry and soy products. Employee two was purchasing goods from the Baishazhou market and Huanan Market back and forth. Employee three was delivering goods in Huanan Market.



Possible sources of infection: employee one might be infected from environmental exposure in Huanan Market, employee two and employee three might be infected from market environmental exposure or human to human transmission

The onsets and N=3 description of WHO cluster 2 and the Fig.25 of the WHO report mean that the stall is likely thisone

ttps://aiqicha.baidu.com/company\_detail\_16131223666317 West 13th X2, 15th X1 in 2007 https://aiqicha.baidu.com/company\_detail\_11227908159172 West 13th X2 established in 2018

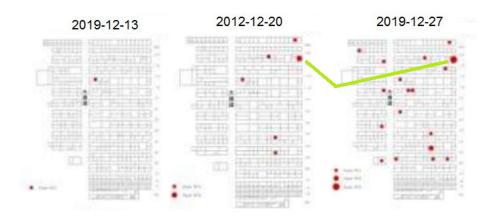


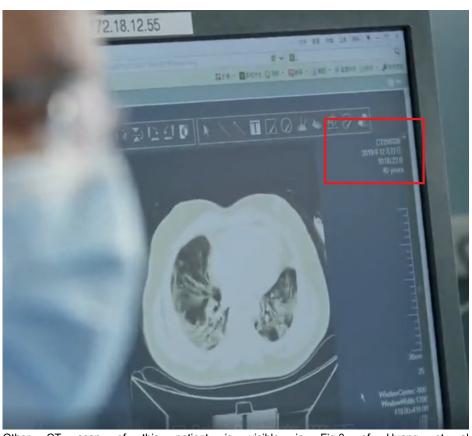
Fig. 25. Spatial distribution of vendor cases associated with the Huanan market by week of onset.

There are two 40M in the WIV paper and likely in Zhang Jixian's <a href="https://ag.163.com/v/video/VYO4G9UV1.html">https://ag.163.com/v/video/VYO4G9UV1.html</a>
It is likely 40M1 ICU-05 who is more severe

The name was deciphered from the handwritten document in <u>Cases from Interview with Zhang</u>
<u>Jixian from Hubei Provincial Hospital of Integrated Chinese & Western Medicine</u>

Several circumstantial evidences that he is the 40M at the top of the handwritten document. He is described as selling "frozen food, like poultry" <a href="https://youtu.be/jUHiQRJiOSQ?t=1524">https://youtu.be/jUHiQRJiOSQ?t=1524</a>

On the other hand based on the N=3 cluster and the market maps his stall may be
Xinyuan Frozen Food Operation Department
<a href="https://aiqicha.baidu.com/company">https://aiqicha.baidu.com/company</a> detail 16131223666317 West 13th X2, 15th X1 in 2007



Other CT scan of this patient is visible in Fig.3 of Huang et a <a href="https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext">https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext</a>

Additional information about this case:

Discussion of this case:

#### Francisco comment

#### Francisco

7:37 PM Sep 10

same as WH19008 plus 2 mutations more. So WH19008 is an ancestor

#### Francisco

5:24 AM Sep 4

WH19003 same as Wuhan-Hu-1 in 8782, 18060 and 28144.

In positions 21316 (some As instead of Gs) and in 24325 (many Gs instead of As) vs Wuhan-Hu-1. Same two mutations as WIV02.

T29095 1 read in WH19003

From babar: I'm not convinced by Francisco's claim that 32M1 is among the 4/7 market related patients of Zhang Jixian.

Zhang Jixian said once that "the 4 patients knew each other, all coming from the market" but this is very ambiguous if they knew each other or only had the same workplace.

She should have mentioned it more precisely if two worked in the same stall, that's the kind of thing you notice in an hospital when two of your patients are boss and employee.

On the other hand there is clearly a 40M in Zhang Jixian's 7 patients as shown in <a href="https://3g.163.com/v/video/VYO4G9UV1.html">https://3g.163.com/v/video/VYO4G9UV1.html</a> (see also the "cases from interview with Zhang Jixian" paragraph at the end of this document)

## DRASTIC015

Age&Sex 40M2
Chinese name 胡笔X
Name BiX Hu
Type Positive
Wet market Vendor

Onset 2019-12-22 (2019-12-23 in the WHO report)

1st Admission 2019-12-28

Discharged Death N
Hospital Dec 31st Jinyintan
Lineage B

Cluster CN-WHO 2.X

 1st 27 JYT
 1

 2nd 41 JYT
 1

 CN-WHO
 S12

 ICU JYT
 ICU-09

 WIV
 WIV06

 IPBCAMS-WH 

 HBCDC-HB 

 WH

 IME-WH
 IME-WH

IME-WH IME-WH02 (Mix-up in the WHO report which says IME-WH02)

IVDC -

WH190 WH19010

WHU -Other -

Genbank MN996530, MT291828

GISAID EPI\_ISL\_402129, EPI\_ISL\_529215

GW GWHABKN00000000

NMDC -CNGB -

 BioProject
 PRJCA002163, PRJCA002202, PRJNA605907, PRJNA605983

 SRP/CRA
 CRA002334, CRA002423, CRA002475, SRP248092, SRP249613

SRR/CRR CRR116152, CRR122278, CRR122285, CRR125937, CRR125945,

SRR11059943, SRR11092056, SRR11092060

SAM SAMC133239, SAMC134553, SAMN14081561, SAMN14082199

Notes

2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19

2019-12-20

2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	Integrated
2019-12-29	Jinyintan
2019-12-30	Jinyintan
2019-12-31	Jinyintan
2020-01-01	Jinyintan
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	Jinyintan
2020-01-12	Jinyintan
2020-01-13	Jinyintan
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
مام ماد	

check

Linked cases:

# References for the above summary:

The WIV paper  $\underline{\text{https://www.nature.com/articles/s41586-020-2012-7/tables/1}}$  and

https://www.nature.com/articles/s41586-020-2012-7/tables/2

Patient No.	Gender	Age	Date of Onset	Date of Admission	Symptoms When Admitted	Current Status (2020.01.13)	Diagnosis history
ICU-01*	Male	62	2019.12.12	2019.12.27	fever	recover, discharged	negative
ICU-04	Male	32	2019.12.19	2019.12.29	fever, cough, dyspnea	fever, intermittent cough	negative
ICU-05	Male	40	2019.12.17	2019.12.27	fever (38 °C), expectoration, malaise, dyspnea	fever, malaise, intermittent cough	AdV (IgM)
ICU-06	Female	49	2019.12.23	2019.12.27	fever (37.9 °C), palpitation	fever, malaise, cough	Coronavirus (nt)
ICU-08	Female	52	2019.12.22	2019.12.29	fever (38.5 °C), expectoration, malaise, dyspnea	recover, discharged	Streptococcus pneumoniae (nt)
ICU-09	Male	40	2019.12.22	2019.12.28	fever (38.5 °C), expectoration	fever (38.5 °C), malaise, expectoration, dizziness	negative
ICU-10	Male	56	2019.12.20	2019.12.20	fever, dyspnea, chest tightness	fever, malaise, cough, dyspnea	negative

### **CN-WHO Report**

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID		Sequence ID		Relation to the Huanan market		Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>		Lineage			
	S12		GWHACAU 01000001		Vendor		Dry cargo	1	23 Dec	30 Dec	2432	25 (S) <sup>b</sup>	L/I	В
	<u> </u>					139		Illumina MiSeq						
			2019/12/30	WIV	06	//		//		MGISEQ 2000			0	0.01
S12	2019/12/	23	2019/12/30	2/Wi	S-CoV- uhan_IME- )3/human/2019/	2432	5	24	325	Ion Torrent X5I	Plus	1407	0	).55

Mix-up in the WHO report, it should be IME-WH02 instead of IME-WH03 (see 32M1)

In the paper  $\frac{https://academic.oup.com/cid/article/71/15/713/5780800\#supplementary-data}{supplementary table 1} from supplementary table 1$ 

There are two 40M, WH19010 is the least severe one, and with a latter onset.

ID	Gender	Age	Clinical lab	Days after onset	ICU	Outcome
nCov1	female	49	Negative	8	N	Recovered
nCov2	female	52	Negative	8	Y	Recovered
nCov3	male	40	Negative	15	Y	Recovered
nCov4	male	61	Negative	12	Y	Deceased
nCov5	male	40	Negative	8	N	Recovered
nCov6	male	56	Negative	10	Y	Recovered
nCov7	female	53	Negative	7	N	Recovered
nCov8	male	41	Negative	4	N	Recovered
	nCov1 nCov2 nCov3 nCov4 nCov5 nCov6 nCov7	nCov1         female           nCov2         female           nCov3         male           nCov4         male           nCov5         male           nCov6         male           nCov7         female	nCov1         female         49           nCov2         female         52           nCov3         male         40           nCov4         male         61           nCov5         male         40           nCov6         male         56           nCov7         female         53	nCov1         female         49         Negative           nCov2         female         52         Negative           nCov3         male         40         Negative           nCov4         male         61         Negative           nCov5         male         40         Negative           nCov6         male         56         Negative           nCov7         female         53         Negative	nCov1         female         49         Negative         8           nCov2         female         52         Negative         8           nCov3         male         40         Negative         15           nCov4         male         61         Negative         12           nCov5         male         40         Negative         8           nCov6         male         56         Negative         10           nCov7         female         53         Negative         7	nCov1         female         49         Negative         8         N           nCov2         female         52         Negative         8         Y           nCov3         male         40         Negative         15         Y           nCov4         male         61         Negative         12         Y           nCov5         male         40         Negative         8         N           nCov6         male         56         Negative         10         Y           nCov7         female         53         Negative         7         N

#### Additional information about this case:

The name 胡笔X is guessed from the <u>Zhang Jixian handwritten document</u> Rodolphe's guess is a bit different: 胡王孔

In Brian's map <a href="https://docs.google.com/spreadsheets/d/1cTtHsk61au5d-Cu2P7zrBZtxgcj3">https://docs.google.com/spreadsheets/d/1cTtHsk61au5d-Cu2P7zrBZtxgcj3</a> jnqHnCQwHpj-3Y/edit#gid=1369584120

There are two cases whose name fits partially,

胡玉全 (vegetables, 13th central alley) and 胡克砚 (edible fungi, street 11, neighboor of a positive vegetable stall)

#### Note from Francisco

Francisco 5:24 AM Sep 4

Some [same?] mutation in position 24325 as cluster CN-WHO 2

Discussion of this case:

# DRASTIC016 Mr Chen the Jiangxia Accountant

Commented [1]: I will further rewrite this soon

Age&Sex 41M1

Chinese name 陈宏纲

Name Honggang Chen Type Positive

Wet market No

Onset 2019-12-16 1st Admission 2019-12-22

Discharged - Death N

Hospital Dec 31st Jinyintan

Lineage B

Cluster

 1st 27 JYT
 27

 2nd 41 JYT
 27

 CN-WHO
 S01

 ICU JYT
 ICU-07

WIV -

IPBCAMS-WH-03

 HBCDC-HB 

 WH

 IME-WH

 IVDC

 WH190

 WHU

 Other

 Genbank
 MT019531

 GISAID
 EPI\_ISL\_403930

 GW
 GWHABKH00000000

NMDC -CNGB -

BioProject PRJCA002165

SRP/CRA -

SRR/CRR -

SAM SAMC133243 Notes Wuchang accountant

2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 -

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Jiangxia
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Central
Central
Jinyintan
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2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

# Linked cases:

# References for the above summary:

# CN-WHO report

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
S01	EPI_ISL_40 3928	Visitor to another market		8 Dec	1 Jan 2020	7866 (ORF1a)	L/B

The China-WHO joint report contains numerous internal inconsistencies when it comes to Chen's case which are discussed below

— Chen's bit in WHo report being in xinhua section - daszak interview in NYT

"That December the eighth date was a mistake," Dr. Daszak said.

The W.H.O. team never asked the accountant the date his symptoms began, he said. Instead, they were given the Dec. 8 date by doctors from Hubei **Xinhu**a Hospital, who handled other early cases but did not care for Mr. Chen. "So the mistake lies there," Dr. Daszak said.

While the doctors at Hubei Xinhu Hospital said that the onset of the accountant's illness had been Dec. 8, a senior doctor at Wuhan Central Hospital, where Mr. Chen was treated, had told a Chinese news outlet that he developed symptoms around Dec. 16.

Asked about Mr. Chen's case, China's National Health Commission said it stood by comments made by Liang Wannian, the leader of the Chinese side of the W.H.O.-China investigation who led the interview with the Hubei Xinhua Hospital doctors. Mr. Liang told a news conference in February of this year that the earliest Covid case showed symptoms on Dec. 8 and was "not connected" to the Huanan market.

NB - WHO report:
Market exposure - rt mart
Contact with live animals - wrong
Contact with dead animals?
Sample IDs - wrong
History of travel - maybe wrong
Onset -unclear - may be wrong

#### Additional information about this case

Mr Chen lived in Jiangxia, in the residential district closest to the Wuhan institute of Virology's Jiangxia (Zhengdian) location, where the BSL3/4 labs are located and most likely had symptoms onset on December 16th. He had no contact with any live animals or markets selling them.

Remarkably, especially considering his significance as the first official case in the report and the fact he was interviewed in person, the China-WHO joint report inaccurately records Chen's location, date of onset, contact with animals and potentially his travel history. Here we present and review the evidence that Chen lived in Jiangxia district with the only conflicting secondary

(unlikely) possibility being a home address in Wuchang, as well as the evidence of 16 December symptom onset. Some of this evidence has recently been published by Worobey in Science[] in advance of the completion of our report in a manner we find lacking.

### The China-WHO report account and its many errors

Mr. Chen thankfully recovered from his illness and was interviewed for the China-WHO joint team. The report provides information from Mr. Chen's interview in two places in the annexes of the Chinese team's contribution to the China-WHO report.

1. Annex D1 ('Xinhua Hospital' [another name for the Hubei Hospital of Integrated Traditional Chinese and Western Medicine]) on page 117:

Note that an onset date of 8 December 2019 is mentioned here and claimed to be the earliest, as well as no evidence of contact with wild animals, healthcare settings, or travel

Interview with patient recovered from COVID-19

- The patient in the COVID-19 reporting system with the earliest date of onset date[sic] (8 December 2019) agreed to a face-to-face interview with the joint international study team.
- The WHO team asked some questions about the patient's history and family and were told that the person was an accountant by profession and worked for his family company.
- While details of the interview are not disclosed here to protect the person's privacy, the interview found no evidence for high-risk exposures (wild animals, mass gatherings, contacts with healthcare settings, contact with symptomatic individual, travel, etc.). The person mentioned one relative working in a healthcare setting, and one relative visiting a local market, but there were no illness reports related to these locations at that time. The person commuted to work by public transport, and had not travelled outside Wuhan.
- The WHO team was told that earlier potential cases were given the opportunity to be interviewed, but were unwilling or unable to attend.

This page gives no mention of his location but details such as his profession as an accountant and relative working in a healthcare setting clearly link his case with other data sources.

It is incredible that in a face-to-face interview with the person believed to be the earliest known case, their date of onset was not discussed and properly clarified, as these errors imply.

2. Annex E4('Analysis of market-related cases and the cluster outbreak in the Huanan Market') on page 178:

[...]the first known case (8 December) had no history of exposure to Huanan Market (none of the patient, family members and other contacts had history of exposure to Huanan Market). The market he visited was RT-Mart supermarket in Jiangxia District, which was more than 20km away from the Huanan Market.

This mention of RT-mart in Jiangxia is notable. RT-mart is a Taiwanese supermarket chain similar to Walmart or Carrefour. We provide exterior and interior photos of the relevant RT-mart branch which very clearly do not represent a location where zoonotic transmission could occur. There is only one RT-Mart in Jiangxia.

#### Unreadable maps

Below is the figure in the Annex E2 ('A report on early cases', page 156) of China-WHO report<sup>1</sup> with the quality unchanged from the report. None of the legends are readable in the original

<sup>&</sup>lt;sup>1</sup> "WHO-convened Global Study of Origins of SARS-CoV-2: China Part Annexes." https://www.who.int/docs/default-source/coronaviruse/who-convened-global-study-of-origins-of-sars-cov-2-china-part-annexes.pdf?sfvrsn=3065bcd8\_5. Accessed 23 Aug. 2021. (Page 156)

#### version.

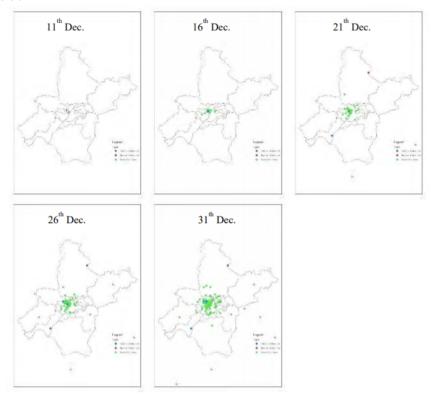
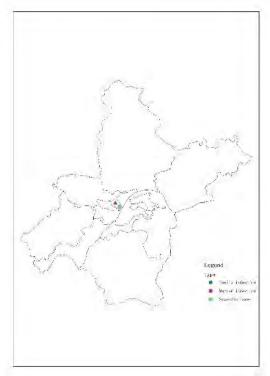


Fig.17. Spatiotemporal distribution of cluster and sporadic cases.

Below is the first map in that figure, unmodified and at original resolution<sup>2</sup>. The text of the legend is totally illegible.



We would like to draw attention to two important points to note in these five maps:

- Note that no dot appears anywhere in Jiangxia district (the large southern district) until the final map.
- 2. Note also that **no dot appears in Wuchang district** in the 11th December map, indeed none are south of the river. Ambiguous points on the boundaries appear in the 16th and 21st December maps, and it is only in the 26th December map that dots unambiguously appear in Wuchang.

<sup>&</sup>lt;sup>2</sup> "WHO-convened Global Study of Origins of SARS-CoV-2: China Part Annexes." https://www.who.int/docs/default-source/coronaviruse/who-convened-global-study-of-origins-of-sars-cov-2-china-part-annexes.pdf?sfvrsn=3065bcd8\_5. Accessed 23 Aug. 2021. (Page 156)

These omissions are repeated and built upon by Holmes *et al.* 2021 in their *Cell* pre-proof<sup>3</sup>, which presents a sanitised version of these maps.

map:

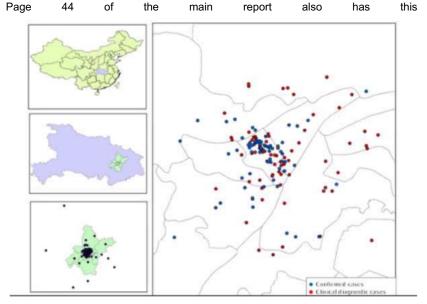


Fig. 23. Notified cases (confirmed and clinically diagnosed) with onset in December 2019 in Wuhan (main figure), with China, Hubei province and areas adjacent to Wuhan shown for context.

Which is also very low quality, omitting Jiangxia entirely in the main map, though seemingly containing what is likely Chen's dot in the tiny map in the bottom left.

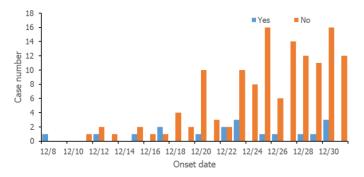
#### 3. Internal contradictions of the China-WHO joint report

As we have noted, the CHina-WHO report states that Mr Chen, the earliest official case with onset December 8<sup>th</sup>, had no contact with wild animals, travel outside Wuhan, and exposure only to a modern RT-Mart. However a few pages later on page 153 we see this graph:

<sup>&</sup>lt;sup>3</sup> Holmes *et al* (Aug 21), 'The origins of SARS-CoV-2: A critical review - Cell Press', available at <a href="https://www.cell.com/cell/pdf/S0092-8674(21)00991-0.pdf">https://www.cell.com/cell/pdf/S0092-8674(21)00991-0.pdf</a>.

### 3. History of live animals exposure

Among 152 COVID-19 cases, there were 18 cases with a history of live animal exposure, and the onset date was uniformly distributed, as shown in Fig. 12.



This clearly records him (the first case) as having exposure to live animals, despite a similar graph correctly recording him on page 150 as an office clerk. This could be a further mix up of accountant Mr. Chen, age 41, with a second Mr. Chen, also aged 41, working at Hua'nan market, as discussed in Appendix XXXXX. WHO investigation team member Thea Kølsen Fischer has said in an interview that he had no animal contact other than "being in proximity of metres to a wild street cat" <sup>4</sup>.

2. In addition to "live animals" exposure he is recorded in the China-WHO report as having "market exposure", despite his own statements to the contrary in the report and interviews(Appendix XX full transcript). This could again perhaps be confusion between different 'Mr. Chen's, or a misunderstanding of his trips to RT-Mart - certainly not a place relevant to zoonotic transmission).

Figure 6 p.78 of the of the China-WHO report showing the December cases, with the 13 sequenced patients highlighted incorrectly show's Chen having contact with an 'Other Market':

<sup>&</sup>lt;sup>4</sup> Thea Kølsen Fischer interview on 'This week in Virology', 29:00 mark https://youtu.be/d7kRxmEgzbQ?t=1740



From Babar: also please pay attention to the map in the same figure 6 showing home addresses of all December sequences (with some conflicting data particularly for Chen or 61M, the blue dot near central hospital)

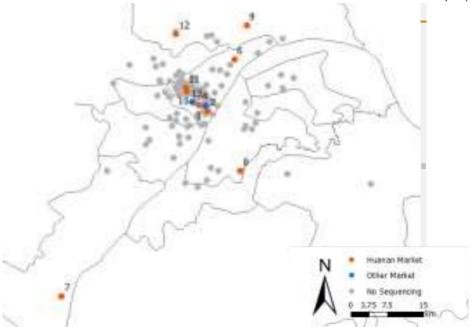


Fig. 6. 174 COVID-19 pneumonia cases classified by genome sequence availability and market exposure. Top: the time series; bottom: the spatial distribution - note: "Huanan market" and "Other market" in the legend refer to market exposure for the 13 early cases sequenced.

As does the following figure in the Chinese Annexes (page ??????????

### 1. Market exposure history

Among the 168 cases, 93 cases had been to markets, 47 cases had only been to the Huanan Market, and 38 cases had only been to other markets. Among the 38 cases, 3 clusters (2 persons in each group) had been to the same market, the remaining 32 cases had been to different markets. Other 8 cases had been to both the Huanan Market and other markets. According to the onset date, the peak incidence of cases with market exposure history was earlier than cases without market exposure history, as shown in Figure 9.

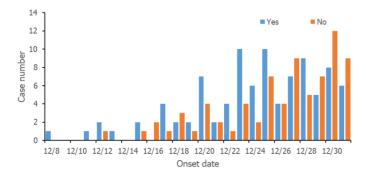


Fig. 9. onset curve of 168 cases breakdown by with or without market exposure history.

Even his official sequencing record in the the official China National Center for Bioinformation database shows him as having 'no market exposure':

Clinical information	
age	41
gender	M
Occupation	NA
Date of attack	2019-12-16
Admission date	2019-12-22
Travel history/contact history	No market exposure
severity	Serious
Patient status	Hospitalized
Clinical symptoms and latent days	High fever(39 °C) and dry cough at the onset of the illness. He developed acute respiratory distress syndrome 7 days later

CNCB/NGDC record for Mr Chen https://ngdc.cncb.ac.cn/ncov/genome/accession?q=GWHABKJ00000001

3. In a further possible error in the report he is recorded as having no history of travel, however in audio of an interview with *The Paper* he describes a late November trip to Mulan mountains. (full transcription in appendix XXX). While this is a rural area 90 km outside central Wuhan, it does

technically fall within Wuhan's Huangpi administrative district, which gives one plausible explanation for its omission.

The report does not state what timeframe was used to make the distinction for what constitutes 'recent' travel, but a clue can be found on page 157 of the Annexes. A patient with onset date December 15<sup>th</sup> and travel history to Thailand in November is mentioned, suggesting a window of a minimum of 15 days. Only if the Thailand trip were on the last days of November and Mr. Chen's trip in early-late November, could this correlate with Chen's alleged onset date of December 8th, assuming a 90+km trip to the mountains would count as 'travel'.

More errors - Washington Post

Wrong sequence (see

Wrong collection date? 30thDec

Wrong Onset date [not resolved to this day] Page 73: main report

Table 7. The overview of sequences from early patients (with onset date before 31 December 2019)

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name)"	Lineage
S01	EPI_ISL_40 3928	Visitor to another market		8 Dec	1 Jan 2020	7866 (ORF1a)	L/B

From: https://www.washingtonpost.com/world/asia\_pacific/covid-wuhan-outbreak-who/2021/07/15/51e7e8a6-e2c6-11eb-88c5-4fd6382c47cb\_story.html

The WHO did not explain why a map in the annexes of the WHO-China joint report appears to show the first case on one side of the Yangtze River, while the Wuhan government had announced last year that the first patient, who fell ill Dec. 8, 2019, lived on the other side of the river, in Wuchang district.

Tarik Jasarevic, a WHO spokesman, said in an email that the agency cannot comment on what the Wuhan government announced last year, but the question of where the first-known patient lived relative to the river was not relevant to competing hypotheses about the origin of the virus. **The issue is not important**, he wrote, because "the current first known patient is most probably not the first case."

The agency confirmed that the earliest official case, Patient S01, was a 41-year-old man, with virus genome sequences EPI\_ISL\_403930, MT019531, and GWHABKH00000001 in various databases. The report had listed a different sequence, belonging to a 61-year-old man, which Jasarevic called an editing error.'

It is clear there are significant contradictions, issues and uncertainties with the data in this report in addition to those already found by the *Washington Post* and even before we begin to highlight the most significant issues.

# Interview with Chen by The Paper

Chen was extensively covered by Chinese media, including an interview with a prominent investigative journalism site *The Paper* (澎湃新闻). Unfortunately the original article has since been deleted but the interview was quoted and republished by many other news sources<sup>5</sup>.

The author, who appears to have conducted the interview with Chen and his family in person based on the accompanying video, writes

"...Mr. Chen was the first patient with no history of contact with the South China Seafood Market. He developed a fever on December 16 and went to Jiangxia People's Hospital for medical treatment as soon as possible.

He explained that he was engaged in financial work in a certain company and had no history of exposure to live poultry. He became a critically ill patient at this time.

### Then later

Not only does he have no history of contact with the South China Seafood Market, Mr. Chen lives in Jiangxia, and the straight-line distance from the market is more than 30 kilometers.

### And

Mr. Chen said that for half a month before the onset of the illness, he had not been to other places except for work. In the previous inquiry by the CDC on his life trajectory, the time was even pushed to the end of November.

### The article directly tells us that

- He lived in Jiangxia
- Jiangxia People's Hospital was where he first sought immediate medical treatment.

 $\underline{\text{https://mp.weixin.qq.com/s?src=11\&timestamp=1629823520\&ver=3272\&signature=nrz46*aPAjd*hwsC7w}}$ 

hohl5jHbCEhNQdfjWuPxDu4Pl5lxNAglKkDkLKVlQdlQDpAkrjHnfH\*x6B70MYMSFvc5nSG0m\*STHQFEOdUmndAwdsHSm0VeWtAUZnK9\*sOl3&new=1archived at https://archive.vn/V29XQ

- His profession correlates with the Mr. Chen in the China-WHO report
- The distance from the Huanan market to his residence is stated to be more than 30 km.
- The CDC traced Mr. Chen's steps (performed contact tracing? Check original article wording) back to late November, contradicting statements by WHO team lead Ben Embarek about the information they were given<sup>6</sup>

The article also contains direct quotes from Mr. Chen

"I had a fever on the 16th. At that time, I had a fever during the day. It should be around noon, from 10 to 12 o'clock. When I was hospitalized in the county hospital (Jiangxia People's Hospital), I would be short of breath when I spoke in this state."

"I was diagnosed with this matter, and the possibility of infection was the greatest on the subway. It may also be that I was infected after going to the hospital." Mr. Chen recalled.

Corroborating the same details and suggesting the subway as the most likely place of infection.

The Paper also produced a video which is surprisingly still live online at the point of writing, but also archived<sup>8</sup> with its audio fully translated in Appendix[CROSSREF]

In the video audio Mr. Chen tells us in his own words:

- "At the end of November [2019] I went to Mulan Mountain [木兰山 a scenic area about 90km north of Wuhan city]."
- "I had no contact with birds or poultry because I don't do grocery shopping"
- "I take the metro to and from work. One thing about my diagnosis is that the greatest likelihood is that I was infected on the metro. And another possibility is that I was infected at the hospital."

As well as confirming the 16th December onset of his case and no contact with the Hua'nan market, much of this is in direct conflict with the details of his case recorded in the China-WHO joint report.

This video contains several partially censored shots of Chen's medical records. Screenshots of these appear in Appendix [CROSSREF] with key details highlighted and translated.

Of relevance to Mr. Chen's location is document 2 (Appendix ZXXXX), which confirms discharge from Jiangxia People's Hospital:

<sup>&</sup>lt;sup>6</sup> "Dansker var chef for WHO's mission til Wuhan: - Måske er nogen slet ...." 12 Aug. 2021, https://nyheder.tv2.dk/udland/2021-08-12-dansker-var-chef-for-whos-mission-til-wuhan-maaske-er-nogenslet-ikke-interesseret. Accessed 23 Aug. 2021.

https://www.thepaper.cn/newsDetail\_forward 6681256

<sup>8</sup> https://mega.nz/file/3rY0wRpl#JQKAS3WxlrmbgQjlGHoiSu40o1lOtq0dRjcl0KlwCw4

Auxiliary examination: 1 copy of discharge record from the First People's Hospital of Jiangxia District, Wuhan City on December 27, 2019 (辅助检查:2019年12月27日武汉市江夏区第一人民医院出院记录1份)

The Paper, hospital documents, and Mr. Chen himself all refer to an onset of the **16th of December 2019**.

According to the above list, Mr. Chen was the first patient with no history of contact with the South China Seafood Market. He developed a fever on December 16 and went to Jiangxia People's Hospital for medical treatment as soon as possible.

He introduced that he was engaged in financial work in a certain company and had no history of exposure to live poultry. He became a critically ill patient at this time.

"I had a fever on the 16th. At that time, I had a fever during the day. It should be around noon, from 10 to 12 o'clock. When I was hospitalized in the county hospital (Jiangxia People's Hospital), I would be short of breath when I spoke in this state."

### Full Interview with The Paper

 $\underline{\text{https://mp.weixin.qq.com/s?src=11\&timestamp=1629823520\&ver=3272\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520\&signature=nrz46*aPAjd*hwsC7w-1629823520*aPAjd*hwsC7w-1629823520*aPAjd*hwsC7w-1629823520*aPAjd*hwsC7w-1629823520*aPAjd*hwsC7w-1629823520*aPAjd*hwsC7w-1629823520*aPAjd*hwsC7w-16298240*aPAjd*hwsC7w-162982*aPAjd*hwsC7w-162982*aPAjd*hwsC7w-162982*aPAjd*hwsC7w-162982*aPAjd*hws$ 

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Archived at: https://archive.vn/V29XO

### Original

# 无华南海鲜市场接触史的重症患者

上述名单中显示,陈先生系首位无华南海鲜市场接触史患者,于12月16日出现发热症状,并在第一时间前往江夏人民医院就医。

他介绍称,自己在某公司从事财务工作,无活禽暴露史,一度成为重症患者,"直到现在都没想通自己怎么感染的"。

"我是16日发的烧,当时白天就发烧了,应该是中午,10点到12点左右吧,在县医院(江夏人民医院)住院期间,就这种说话状态,就会气喘。"

而令他与家人不解的是,在确诊前期,家人并未做任何防护,但截至目前,家人尚无一例发现感染。

陈先生家人告诉记者,陈先生发烧以后,就没有跟自己住在一起了,但自己并没有做防护,包括中途陪同 陈先生转院,都还有过近距离接触。

不仅与华南海鲜市场无接触史,陈先生家住江夏,与市场直线距离更是超过了30公里。

陈先生称,病发前半个月,除了上班,他没去过其他地方。在此前疾控部门对他生活轨迹的问询里,甚至 将时间推到了11月底。

"我确诊这个事情,在地铁上感染的可能性最大,也有可能是我后来去医院被感染的。"陈先生回忆到。

自官方通报首批27名新冠肺炎感染者以来,华南海鲜市场是否为"毒源地",仍在争议中。

### Translation

Severely ill patients without history of exposure to the South China Seafood Market

According to the above list, Mr. Chen was the first patient with no history of contact with the South China Seafood Market. He developed a fever on December 16 and went to Jiangxia People's Hospital for medical treatment as soon as possible.

He introduced that he was engaged in financial work in a certain company and had no history of exposure to live poultry. He became a critically ill patient at one time.

"I had a fever on the 16th. At that time, I had a fever during the day. It should be around noon, from 10 to 12 o'clock. When I was hospitalized in the county hospital (Jiangxia People's Hospital), when I talked in this state, I would pant."

What makes him and his family puzzled is that in the early stage of diagnosis, his family did not take any protection, but so far, the family has not found a case of infection.

Mr. Chen's family told reporters that after Mr. Chen developed a fever, he did not live with him, but he did not protect himself. Even if he accompanied Mr. Chen during the transfer, he had close contact.

Not only does he have no history of contact with the South China Seafood Market, Mr. Chen lives in Jiangxia, and the straight-line distance from the market is more than 30 kilometers.

Mr. Chen said that half a month before the onset of the disease, he had not been anywhere else but work. In previous inquiries from the CDC about contact tracing, it was even pushed back to the end of November.

"It is most likely that I was infected on the underground when I was diagnosed with this thing, or I could have been infected later when I went to the hospital." Mr Chen recalled.

Since the official notification of the first batch of 27 people infected with new coronary pneumonia, whether the South China Seafood Market is a "source of the virus" is still under dispute.

The Paper also produced a video:

https://www.thepaper.cn/newsDetail forward 6681256

Archived

at:

https://mega.nz/file/3rY0wRpl#JQKAS3WxlrmbgQjIGHoiSu40o1IOtq0dRjcI0KlwCw4

And with audio transcribed in English in Appendix AAAA

We hear Mr. Chen describe a 16th December onset in his own words, as well as describing a trip to Mulan mountain at the end of November. No travel for half a month before onset and trip at end of Nov suggests December 16th onset more than December 8th. He had been nowhere other than work for two weeks before onset according to *The Paper's* article.

Medical documents in the video from 'The Paper'

This video contains several shots of Chen's medical records. These also seem to support 16 December onset and a 27 December move to Wuhan Central Hospital on Nanjing road.

### Document 1

This record is from after Chen moved from Jiangxia to Wuhan Central Hospital/ Wuhan City 2nd Hospital on Nanjing road on the 27th December

### Key information:

1. Wuhan Central Hospital (武汉中心医院)

2. Wuhan City 2nd Hospital (武汉市第二医院) (Nanjing road in Jiang'an district)

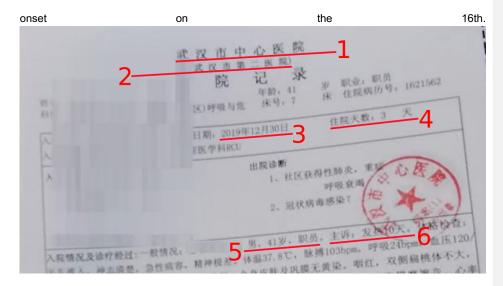
3. 30 December 2019 (2019年12月30日)

4. Days stayed in hospital: 3 (住院天数 3天)

5. Male, 41 yrs old, office worker (男, 41岁, 职员)

6. Complaint: Fever for 10 days (主诉: 发热10天)

A stay of 3 days and admission with a fever for 3, recorded on the 30th, would support onset around the 17th. Imprecision of a day or so seems more likely than of 9 days, lending support for



### Document 2

- 1. The patient was admitted to the hospital with "intermittent fever, cough for 2 weeks, and shortness of breath for 1 week" (患者因"间断发热, 咳嗽2周,伴气促1周"入院)
- 2. Auxiliary examination: 1 copy of discharge record from the First People's Hospital of Jiangxia District, Wuhan City on December 27, 2019 (辅助检查:2019年12月27日武汉市江夏区第一人民医院出院记录1份)

The caption at the bottom transcribes Mr. Chen's own words from the video interview. An apparently masked version of his voice affirms the 16th of December as the date his fever began (see Appendix 8.6 for full interview transcript in English).

This document appears to refer to 2 weeks of symptoms before the 27<sup>th</sup>, which suggests onset around the 13<sup>th</sup>. Unless it were to be interpreted to be 2 weeks before the 16<sup>th</sup>, however this would be in strong contrast with the recorded words of Mr. Chen, being played in the video and subtitled beneath.

间质性肺炎

入院情况及诊疗经过:

患者因"间断发热、咳嗽2周,伴气促1周"入院。既往否认高血压、冠心病及糖尿病病等否认结核及肝病史,有右侧手臂开放性外伤史,行手术清创缝合术,否认输血史,否认含物及物过敏史,否认吸烟及饮酒史。近期无出差及活寓生鲜接触史。入院查体:120平年推入病务。并不完全,持于法林、李美内等、本体介作、中时、粘膜无花白、潮红、发绀、黄染、无规 急性面容,神志清楚,营养中等,查体合作,皮肤、粘膜无苍白、潮红、发绀、黄染 无皮下出血、紫癜、瘀斑。浅表淋巴结无肿大, 眼睑无水肿, 结膜无充血, 巩膜无黄染, 双侧瞳 等大等圆,瞳孔对光反射正常,颈软,双肺呼吸音粗,双下肺可闻及散在湿啰音,心律整齐 未闻及病理性杂音,全腹柔软,无腹肌紧张,腹部无压痛、反跳痛,肝. 胆囊、脾 腹部未触及包块,移动性浊音阴性,肠鸣音正常,四肢、关节无异常,生理反射存在,病理反射, 引出 辅助检查: 2019年12月27日武汉市江夏区第一人民医院出院记录1份(住院号69974): 摘部CT: (216670800) 示:双肺感染性病变,双侧胸膜增厚粘连;甲乙型流感病毒抗原 均为阴性,血气分析:PH:7.445, PCO2:33.6mmHg, PO2:68.5mmHg, 心肌酶:磷酸肌酸激酶 284U/L, 乳酸脱氢酶:369U/L。12-27 武汉市中心医院胸部CT (100278468)示:双肺大片状絮状 片状稍高密度影,边缘模糊,双肺感染、实变,病毒性肺炎待排。12-30 北京博奥医学检验所支 气管肺泡灌洗液超光谱病原微生物 mNGS 检测示: SARS 冠状病毒和铜绿假单胞菌为阳性。入院 后查动脉血气分析、乳酸、电解质、血糖结果示 PH:7.52 PC02:32mmHg P02:74mmHg Na+:134mmol /L;K+:3.7mmo1/1;Ca++:1.03mmo1/1;GLU:5.4mmo1/1;Lac:0.6mmo1/L;HCO3-:26.1mmo1/L;BE: 3.2mmo1/L;THBc:143g/L, SO2:96%, P/F Ratio:113mmHg;全血细胞计数+五分类[2020-01-01 11:09:38]:白细胞计数:6.56×10^9/L;血红蛋白浓度:129g/L↓:红细胞压积:39.3%↓;血小板 计数:280×10\_9/L;中性粒细胞百分数:76.4%↑:淋巴细胞百分数:15.0%↓;红细胞沉降率测定 (ESR) [2020-01-01 11:35:29] :血沉:72mm/h↑;血清铁蛋白测定[2020-01-01 11:46:04] :铁蛋 白:1021.20ng/mL↑:降钙素原检测[2020-01-01 13:27:01]:降钙素原测定:<0.05ng/mL;白介素

# 

# Document 3

1. Wuhan Central Hospital (武汉中心医院)

2. Wuhan City 2nd Hospital (武汉市第二医院

3. Diagnosis certificate ([病情] 诊断证明书)9

(年龄:41) 4. Age: 41

5. 27th Dec 2019 - 30th Dec 2019 (2019年12月27日 - 2019年12月30日)

6. To be filed as discharge records (以归当病历出院记录)

 $^{9}$  "病情" confirmed from a second July 2019 example of the same form of a different patient from the same hospital.



### Chen's Home Address

Note: The form appears to show a partially obscured address. We have confirmed that this would be expected to be the family address (家庭地址) [Hukou address, need explanation that this is his registered community and probably not where he actually lived--BR] by locating a second example of the same form:



We have also confirmed that the character of 专社区459-6 is obscured slightly by the design of this brand of plastic wallet



We have searched for residential communities (社区) with 寺 in their name, returning only results in Wuchang district - not Jiangxia. In fact we have searched through all administrative districts in Jiangxia:

# ^ 行政区划



But no community containing this character in their name were found.

The communities ending in 寺 in Wuchang are:

http://www.stats.gov.cn/tjsj/tjbz/tjyqhdmhcxhfdm/2020/42/01/06/420106011.html

ADD NAMES AND SCREENSHOTS HERE

From exhaustive searching of: http://www.stats.gov.cn/tjsj/tjbz/tjyqhdmhcxhfdm/2019/42.html

We found every residential community with 寺 in its name.

 $\textbf{FROM:} \ \underline{\text{http://www.stats.gov.cn/tjsj/tjbz/tjyqhdmhcxhfdm/2020/42/01/06/420106011.html}}$ 

宝通寺社区居委会 莲溪寺社区居委会

 $FROM: \underline{http://www.stats.gov.cn/tjsj/tjbz/tjyqhdmhcxhfdm/2020/42/01/14/420114407.html}\\$ 

中营寺社区居委会

 $FROM: \underline{http://www.stats.gov.cn/tjsj/tjbz/tjyqhdmhcxhfdm/2020/42/01/06/420106008.html}$ 

梅隐寺社区居委会

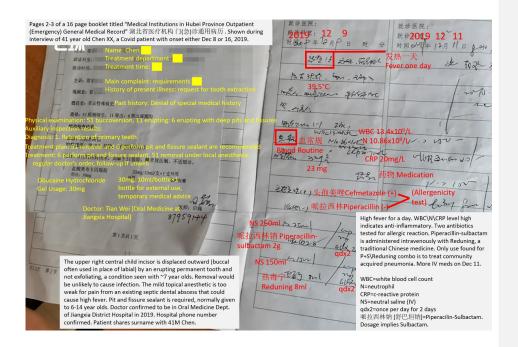
Wuchang District: 梅隐寺社区, 宝通寺社区 and 莲溪寺社区.

Caidian District: 营寺社区

What we found searching for above - we found a business listing old and new address for one, old address plausible

Document 4 Dental records

Add it here with translation and analysis



DENTISTRY ---- all to be updated I'm sure

Liang Wannian agrees: https://archive.vn/ybb2a

Summary of today's findings from pp. 2-3 of Chen's Outpatient Record booklet.

The booklet is a document used across multiple hospital visits. It is visible at 3:36 adn 3:46 of The Paper interview.

Left hand side is a treatment plan for a child's dental work, surnamed Chen, perhaps his son or daughter. It is pasted in following instructions in the front of the booklet, likely after a previous visit. Right hand side shows he had a fever of 39.5° \*on Dec 9\* and a white

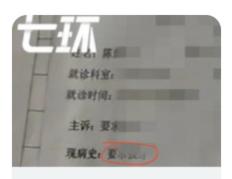
blood cell count of 13\*10^9/L, above normal range of 4-10. Two medications resembling Cefmetazole 头孢美唑, Cefoperazone 头孢哌酮, or Cefodizime 头孢地嗪 are legible. The right half of the right hand page records information for Dec 11.

	北京地区医疗机构
	门急诊病历手册
	Outpatient and Emergency Medical Record
	for Hospitals and Clinics in Beijing
姓名_	性别出生年月
(Name)	
¥ 12:-	B.存品
单位或 (Work U	人(土・川:
	0.00
药物过 (Allergie	
	在本市任何医疗机构
首诊、	复诊或领取检查结果时均请出示本手册 Please bring this medical record
,	with you in every hospital or clinic visit.
*	The start of the s

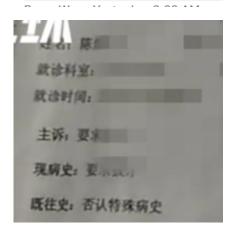
Here is the template for the booklet:

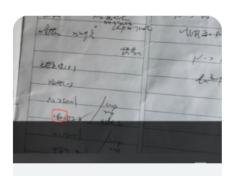
# https://www.docin.com/p-1410852737.html

This seems to be something called an "outpatient record". A flimsy booklet where they scribble in your medical records so you can have it with you if you visit another hospital. Kid had a printout so they glued it in

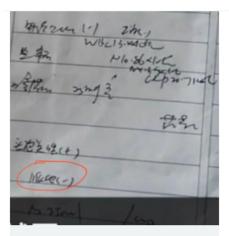


Looks like 要求拔牙, request for dental extraction.



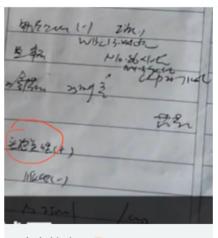


This is clearly 哌, most likely short for 头孢哌X.



For this, I suspect "头孢" as in the row above was dropped for convenience. These two characters look like 哌地. However, there is 头孢哌酮 and 头孢地嗪 but no 头孢哌地...

WBC 白细胞 10.90	75 E	- F	科		室:妇保科	
RBC 红细胞 4.00 3.5—5.5 10 <sup>12</sup> / HGB 血红蛋白 126 110—160 g/L HCT 红细胞压积 0.38 0.36—0.50 L/L MCV 红细胞平均体积 94.8 86—100 fL MCH 平均血红蛋白量 31.5 † 26—31 pg MCHC 平均血红蛋白浓度332 310—370 g/L PLT 血小板 262 100—400 10 <sup>9</sup> /L NEUT*中性细胞比率 82.2 † 45—77 % LYMPIE 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率1.7 0.5—5 % BASO% 嗜碱性粒细胞比率0.1 0—1 % NEUT#中性细胞数 8.97 † 2.0—7.7 10 <sup>9</sup> /L			结 果		参考值	单位
HGB 血红蛋白 126 110—160 g/L HCT 红细胞压积 0.38 0.36—0.50 L/L MCV 红细胞平均体积 94.8 86—100 fL MCH 平均血红蛋白量 31.5 † 26—31 pg MCHC 平均血红蛋白浓度332 310—370 g/L PLT 血小板 262 100—400 10°/L NEUT% 中性细胞比率 82.2 † 45—77 % LYMPHE 淋巴细胞比率 11.2 ‡ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10°/L	WBC	白细胞	10.90	1	4. 0-10. 0	109/L
HCT 红细胞压积 0.38 0.36—0.50 L/L MCV 红细胞平均体积 94.8 86—100 fL MCH 平均血红蛋白量 31.5 † 26—31 pg MCHC 平均血红蛋白浓度 332 310—370 g/L PLT 血小板 262 100—400 10°/L NEUT% 中性细胞比率 82.2 † 45—77 % LYMPH* 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10°/L	RBC	红细胞	4.00		3.5-5.5	1012/1
MCV 红细胞平均体积 94.8 86—100 fL MCH 平均血红蛋白量 31.5 † 26—31 pg MCHC 平均血红蛋白浓度 332 310—370 g/L PLT 血小板 262 100—400 10°/L NEUT% 中性细胞比率 82.2 † 45—77 % LYMPH6 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率1.7 0.5—5 % BASO% 嗜碱性粒细胞比率0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10°/L			126		110-160	g/L
MCH 平均血红蛋白量 31.5 † 26—31 pg g/L MCHC 平均血红蛋白浓度 332 310—370 g/L PLT 血小板 262 100—400 10°/L NEUT% 中性细胞比率 82.2 † 45—77 % LYMPHP 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10°/L	HCT	红细胞压积	0.38		0.36-0.50	L/L
MCHC 平均血红蛋白浓度 332 310—370 g/L PLT 血小板 262 100—400 10 <sup>9</sup> /L NEUT% 中性细胞比率 82.2 † 45—77 % LYMPH® 淋巴细胞比率 11.2 ‡ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10 <sup>9</sup> /L	MCV	红细胞平均体积	94.8		86-100	fL
PLT 血小板     262     100—400     10°/L       NEUT% 中性细胞比率     82.2     † 45—77     %       LYMPH* 淋巴细胞比率     11.2     ‡ 20—40     %       MONO% 单核细胞比率     4.8     3—10     %       EO% 嗜酸性粒细胞比率     1.7     0.5—5     %       BASO% 嗜碱性粒细胞比率     0.1     0—1     %       NEUT#     中性细胞数     8.97     † 2.0—7.7     10°/L	MCH	平均血红蛋白量	31.5	1	26-31	pg
NEUT% 中性细胞比率 82.2 † 45—77 % LYMPHP 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10°/L	MCHC	平均血红蛋白浓度	332		310-370	g/L
LYMPH <sup>®</sup> 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10³/L			262		100-400	109/L
MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT#中性细胞数 8.97 † 2.0—7.7 10³/L	NEUT%	中性细胞比率	82. 2	1	45-77	%
EO% 嗜酸性粒细胞比率 1.7	LYMPH9	淋巴细胞比率	11.2	+	20-40	%
BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10 <sup>9</sup> /L		单核细胞比率	4.8		3-10	%
NEUT# 中性细胞数 8.97 † 2.0-7.7 10 <sup>9</sup> /L	The same				0.5-5	%
			0.1		0-1	%
			8. 97	t	2.0-7.7	109/L
LYMPH: 淋巴细胞数 1.22 0.8-4.0 109/L	LYMPH	淋巴细胞数	1. 22		0.8-4.0	109/L



头孢美唑? Not a perfect match but possible.

 $\alpha$ 

# Cefmetazole (头孢美唑)

Cefmetazole is a cephamycin antibiotic, usually grouped with the second-generation cephalosporins. Wikipedia

ChemSpider ID: 38311

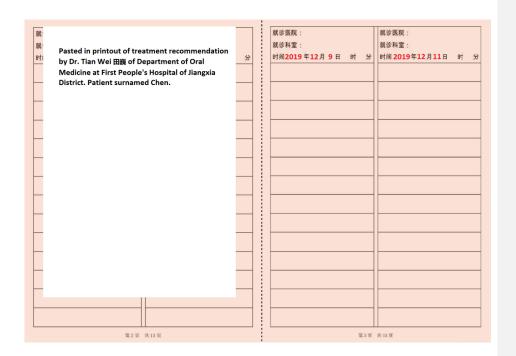
CHEMBI 14: 100110

乳牙滞留



Mention of pseudomonas in (near to SARS and mNGS)

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272 13. 2042 Tokker	£ 100
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# Interview with Dr. Ai Fen

A now censored interview with Dr. Ai Fen<sup>10</sup>, an early hero of the pandemic, mentions a man whose case dates, age, and medical details all corroborate other accounts of Mr. Chen. Notably he is said to be from the '**outer suburbs** of Wuhan' which would not suggest Wuchang district, and also gives dates and times suggesting December 16th onset:

https://www.storm.mg/article/2398343?mode=whole

 $\frac{\text{https://matters.news/}@2020Era/\%E5\%8F\%91\%E5\%93\%A8\%E5\%AD\%90\%E7\%9A\%84\%E4\%}{BA\%BA-bafyreihrpvzudkmtakoxvquhhw75ajqvhkn4oxb4pges3od5rqusa436ba}$ 

<sup>&</sup>lt;sup>10</sup> https://web.archive.org/web/20200312215112/https://news.sina.cn/gn/2020-02-17/detail-imxygvz3653366.d.html?from=wap

# Original

紧接着12月27日,南京路院区又来了一个病人,是我们科一位医生的侄儿,40多岁,没有任何基础疾病,肺部一塌糊涂,血氧饱和只有90%,在下面其他医院已经治疗了将近10 天左右都没有任何好转,病人收到了呼吸科监护室住院。同样做了纤维支气管镜取了肺泡 灌洗液送去检测。

### Translated

Immediately after December 27, another patient came to the Nanjing Road District. He was the nephew of a doctor in our department. He was in his 40s. He had no underlying diseases. The lungs were in a mess. The blood oxygen saturation was only 90%. The hospital has been treating him for nearly 10 days without any improvement, and the patient was admitted to the respiratory intensive care unit. I also did a fiberoptic bronchoscopy, took the alveolar lavage fluid and sent it for testing.

# Interview with Dr. Zhao Su in Caixin News

His case was also covered by *Caixin News*, another Chinese news outlet regularly censored for its investigative journalism. Indeed this article also appears to have since been deleted, but was archived.

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html:

### [our emphasis]

"On December 27, a 41-year-old man surnamed Chen went to Wuhan Central Hospital at Nanjing Road for treatment. "He is an accountant, lives in Wuchang, and has never been to the South China Seafood Market in Hankou. He started to have a fever on December 16 without obvious cause. The highest body temperature was 39.5°C, accompanied by palpitations, chest tightness, breathing difficulties after exercise, and significant decline in his physical strength. He initially went to the First People's Hospital of Jiangxia District on December 22 and did not get better." Zhao Su revealed to Caixin reporters, "He is an acquaintance of a doctor in our hospital. He was transferred to our hospital on the 27th and is also the emergency department. Accepted."

The details and dates of the case corroborate other sources and his medical records, while reaffirming an onset of December 16th

Note also that Hua'nan market is in Jianghan District. However Dr. Zhao Su here refers to it as being in "Hankou", the historic name still used by Wuhanese for the area that includes Jianghan. In this context, the reference to Wuchang in the same sentence very likely refers to the similar historic name for the city south of the river. Colloquially "Wuchang" includes the Wuchang administrative district and urbanized portions of Jiangxia, Hongshan, and Qingshan districts.

Dr Zhao Su goes on to confirm his initial admission to Jiangxia People's hospital and his relative who works at Wuhan Central hospital.

The dates mentioned also correlate with other information about Mr Chen and his medical records; there is little doubt it is the same Mr. Chen.

### Full Interview with Caixin

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html

### Original

事实上,除了已知最早的这一例,2019年12月底,武汉市中心医院还有两例"不明原因肺炎"的患者样本被送往不同机构进行了基因测序。而这两例样本的检测结果,以不同路径对此次疫情的公开产生了重大影响。

12月27日,一名41岁的陈姓男子到武汉市中心医院南京路院区就诊。"他是一个会计,家住在武昌,完全没有去过汉口的华南海鲜市场,大概在12月16日无明显诱因开始发热,最高体温39.5°C,伴有心悸、胸闷、活动后呼吸困难,体力明显下降,先是12月22日在江夏区第一人民医院看病,没有好转。"赵苏向财新记者透露,"他是我们医院一个医生的熟人,27日就转到我们医院来了,也是急诊科收的。"12月27日傍晚,患者在该院呼吸科ICU做支气管镜取样,这次的样本送往了另一家从事NGS检测的北京博奥医学检验所有限公司。

12月30日,北京博奥医学检验所将这位病人的送检报告反馈给了医生,检测结果直接是"SARS coronavirus"(SARS冠状病毒)。

财新记者获得的该份北京博奥医学检验所的检测报告显示,在该名病人的样本中检出SARS冠状病毒和铜绿假单胞菌的高置信度阳性指标。其中对SARS冠状病毒的解释是:一种单股正链RNA病毒,该病毒传播方式为近距离飞沫传播或接触患者呼吸道分泌物,可引起一种具有明显传 性、可累及多个脏器系统的特殊肺炎,也称非典型肺炎。

"他们的基因库不够全,也可能是没做复核,所以犯了一个小错误,实际上跟SARS不是一回事,就是一种新型冠状病毒。"一位基因测序专家向财新记者透露。

然而,就是这份犯了一个小错误的检测报告,却直接引起了武汉医生们的注意,通过社交媒体吹响了对公众的警哨,在一定程度上挽救了相当多人的生命。

### Translation

In fact, in addition to the earliest known case, at the end of December 2019, Wuhan Central Hospital also had two patient samples with "unexplained pneumonia" sent to different institutions for genetic sequencing. The test results of these two samples have had a major impact on the disclosure of the epidemic through different routes.

On 27 December, a 41-year-old man surnamed Chen visited Wuhan Central Hospital's Nanjing Road Campus. "He is an accountant, his family lives in Wuchang and has not been to the South China Seafood Market in Hankou at all. He started to have a fever with no apparent cause on about December 16, with a maximum temperature of 39.5°C, accompanied by palpitations, chest tightness, difficulty in breathing after activity and a marked decrease in physical strength, and was first seen at the First People's Hospital in Jiangxia District on December 22, without improvement." Zhao Su revealed to the Caixin reporter, "He is an acquaintance of a doctor in our hospital, and was transferred to our hospital on the 27<sup>th</sup>, also admitted by the emergency department." In the evening of December 27, the patient did a bronchoscopy sample in the hospital's respiratory ICU, and this time the sample was sent to another company engaged in NGS testing, Beijing Boao Medical Laboratory Co.

On 30 December, the Beijing Boao Medical Laboratory sent the patient's test report back to the doctor, and the test result was straightforward: "SARS coronavirus" (SARS冠状病毒).

The test report obtained by the Caixin reporter from the Beijing Boao Medical Laboratory showed that high confidence positive indicators for SARS coronavirus and Pseudomonas aeruginosa were detected in the patient's sample. The SARS coronavirus is explained therein as a single-stranded positive-stranded RNA virus that is transmitted by proximal droplet transmission or contact with the patient's respiratory secretions and can cause a specific type of pneumonia with significant transmissibility that can involve multiple organ systems, also known as atypical pneumonia.

"They didn't have a full enough gene pool, or maybe they didn't do a review, so they made a small mistake, and it's actually not the same thing as SARS, it's a new coronavirus." A gene sequencing expert told the Caixin reporter.

However, it was the test report, which made a small mistake, that caught the attention of Wuhan doctors straight away, blowing a warning whistle to the public through social media and saving the lives of a considerable number of people to some extent.

Parent's visit to a wet market?

https://twitter.com/mstandaert/status/1384357149988380677

Daszak's interview with CNN

https://edition.cnn.com/2021/02/21/china/who-covid-19-origins-intl/index.html

Peter Daszak, a member of the 17-person WHO team and president of EcoHealth Alliance, which tracks viruses in animals, said the investigation had established the first known patient's parents had likely visited a market selling wildlife in Wuhan.

The patient met the WHO team, Daszak said, and at the end of the meeting added that his parents had visited "a local community wet market in Wuhan", which was not the Huanan seafood market.

Daszak said the WHO panel were not told the details of the market during their visit, and it was possible it sold animals or produce that could have been infected with the novel coronavirus.

"Then he said at the end of the interview -- and it was all being translated and the translator, specifically said -- 'My parents visited a local community wet market," Daszak said of the meeting.

"Now, to use the term 'wet market,' especially under this political constraint we were under, tells me something very significant: that the other markets in Wuhan -- not [only] Huanan market, other markets -- sold wildlife products," Daszak said.

In China, a "wet market" is a term used to describe a venue selling a wide range of fresh produce, which can include live animals.

Daszak said the Chinese scientists, looking into the case as part of the government's response, assured the WHO team the patient's parents had tested negative for the disease, yet the Chinese did not appear to have traced the parents' contacts in that market.

"If you find out the patients are negative, it is not obvious to contact-trace them. But it is worth doing now because we understand something of the spread of Covid around Wuhan," Daszak said.

This patient had no known connection to the Huanan seafood market, the wet market believed to be connected to the virus' early spread, according to Daszak, and "lived a typical urban life. He did not do crowded sporting activities. His main hobby was surfing the internet."

A possible source of confusion, a second Mr. Chen, 41 (DRASTIC017)

In the same Caixin article we encounter a strange coincidence that could partly explain some of the many errors surrounding the case of Mr. Chen: Caixin appears to confirm the existence of a second Mr. Chen, also aged 41, who worked at the Huanan market.

This second 41 year old man also played a significant role in the early days of the pandemic as the source of the first sequence Wuhan-Hu-1[Wu et al. (2020)

https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7094943/], embargoed until 11-Jan-20 then leaked to the world by Zhang Yongzhen (Fudan) and Edward Holmes (Sydney University).

The details of this Mr. Chen do not correlate with the China-WHO report's Mr. Chen. This is discussed further in Appendix (CROSSREF) and it should be noted that Chen (陈) is one of China's most common surnames shared by about 5% of all people in China.

Another case sample from Wuhan Central Hospital came from the Houhu District, which is also adjacent to the South China Seafood Market, and was admitted a day earlier. The patient's surname is Chen, who is a 41-year-old self-employed seafood market operator from Quanzhou, Fujian. On December 20, he developed a high fever of 40°C, body aches and fatigue, coughing with purulent sputum, chest tightness, and shortness of breath. He was hospitalized in the Houhu district of Wuhan Central Hospital for "fever investigation, lung infection". On December 30, the hospital took a bronchoscopy to sample him. An extraOne more sample of the airway lavage fluid was left in the freezer at -80° C environment preservation.

"The reason for keeping an extra sample is that we have been cooperating with Shanghai Public Health Clinical Center of Fudan University (hereinafter referred to as Shanghai Public Health Center), Wuhan Center for Disease Control and Prevention, etc., and there have been major national scientific and technological projects' Main Natural Epidemic Viruses in China The cooperation agreement has been signed for five consecutive years. The Wuhan CDC is responsible for the collection of clinical and environmental samples in the Central China area, and regularly sends them to the Shanghai Public Health Center for pathogen testing. Their third level biosafetyThey have biosafety The third-level (BSL-3) laboratory has a high-throughput sequencing and bioinformatics analysis platform, and our hospital is a sentinel hospital of the Wuhan Centers for Disease Control and Prevention." Professor Zhao Su, Department of Respiratory Medicine, Wuhan Central Hospital introduced.

On the afternoon of December 30, the sample was taken by a chief physician of the Wuhan Center for Disease Control and Prevention. On January 2, another researcher from the Wuhan Center for Disease Control and Prevention wrapped the samples in dry ice in foam and metal packaging, iron boxes, and foam boxes, and transported them to Shanghai by express railway along with other animal specimens. On January 3, the team of Professor

Zhang Yongzhen from the Shanghai Public Health Clinical Center received the sample. The center belongs to Fudan University. Zhang Yongzhen himself is a researcher at the Institute of Infectious Disease Control and Prevention of the Chinese Center for Disease Control and Prevention. Under the funding of key research and development projects, it is engaged in research work such as zoonotic diseases and the investigation of virus resources of major natural epidemic sources in China. Many hospitals including Wuhan Central Hospital, Wuhan Center for Disease Control and the University of Sydney, Australia, etc. As a member of the project team.

In the early morning of January 5, Zhang Yongzhen's research team detected a new SARS-like coronavirus from the samples, and obtained the virus's entire genome sequence through high-throughput sequencing; the evolutionary tree drawn from the sequencing data also confirmed the Wuhan new coronavirus Viruses have never existed before in history. The Shanghai Public Health Center immediately reported to the Shanghai Municipal Health Commission and the National Health Commission and other competent authorities on the same day, reminding them that the new virus is of the same origin as SARS and should be transmitted through the respiratory tract. It is recommended that appropriate disease control and epidemic prevention measures be taken in public places. On January 6, the China Centers for Disease Control and Prevention initiated a secondary emergency response.

In fact, that is what happened:

- 41M1 Chen --> IPBCAMS-WH-03 Wuchang accountant, Jiangxia-Central-Jinyintan
- 41M2 Chen --> Wuhan-Hu-1 wet market operator, Central-Jinyintan

I do not rule out Caixin made a mistake with 41M2 calling him Chen (unique source telling his surname)

More discussion here

https://twitter.com/franciscodeasis/status/1415826311742955523

This was basis for correction pushed by WAPO?

A post on Toutiao supporting 8<sup>th</sup> December onset and a second reference to 'Wuchang' as residence:

The <u>Health Times interview</u> quotes an official reply from the authority in charge, the Wuhan New Coronary Pneumonia Prevention and Control Headquarters on Toutiao 今日头条<sup>11</sup>, about a Mr Chen who lives in Wuchang. The post was a response to a question asked by a user called @Netizens to the 'Ask Wuhan' account of the Wuhan Municipal Committee and Municipal Government.

On February 26, the "Wuhan Release" online account replied to the netizen "Local Extender" that the medical treatment team of Wuhan New Coronary Pneumonia Prevention and Control Headquarters had replied:

"According to the query information system, the earliest registered and reported new coronary pneumonia patient in our city was Chen. The onset time was December 8, 2019. The patient denied having been to the South China Seafood Market."

The response mentions a Mr Chen, who lives in Wuchang. We are unclear if this is the same Mr Chen or someone else, since Chen (陈) is one of China's most common surnames. It should be noted that in colloquial use 'Wuchang' can be used to refer to a large area East of the river, encompassing Jiangxia. His onset date is stated as 8th December.

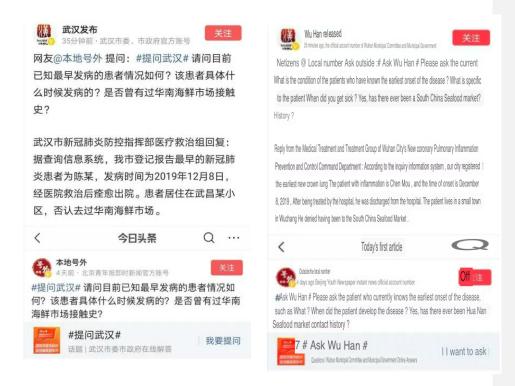
The Health Times article contains an interview of Yu Chuanhua, vice president of Hubei Health Statistics and Information Society and professor of epidemiology and health statistics at Wuhan University, who was the very person in charge of the official database of confirmed and suspected cases in China. In that interview he explicitly refers to the 8<sup>th</sup> Dec as the earliest known onset date:

"As of February 25, our entire database has about 47,000 cases. There are some data on patients with onsets before December 8 last year, but we cannot be sure of the authenticity of these data, and we need to verify further."

# Add 8.2.7.1

 $\frac{\text{https://web.archive.org/web/20200111031745/http://wjw.wuhan.gov.cn/front/web/showDetail/2020011109036}{1109036}$ 

<sup>&</sup>lt;sup>11</sup> https://www.toutiao.com/a6903473200500326916/



This social media post on 今日头条 has been confirmed by several news media to be from an official government linked account (account: https://profile.zjurl.cn/roque/ugc/profile/?user\_id=4395168282&media\_id=4395168282.).

# Media references to the toutiao post:

https://www.sohu.com/a/376114369 120054884

https://baijiahao.baidu.com/s?id=1659599084578484355&wfr=spider&for=pc

https://www.yicai.com/news/100523047.html

https://baijiahao.baidu.com/s?id=1659590058874711074&wfr=spider&for=pc

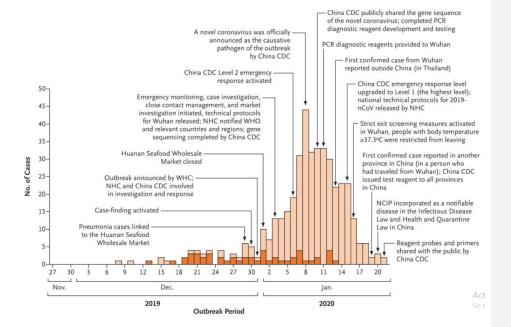
### 认证为"武汉市委、市政府官方账号"的"武汉发布"发布微头条称

Certified as Official account of Wuhan Municipal Party Committee and Municipal Government "武 汉发布" [name of account that sent the message] sent a 'micro headline'

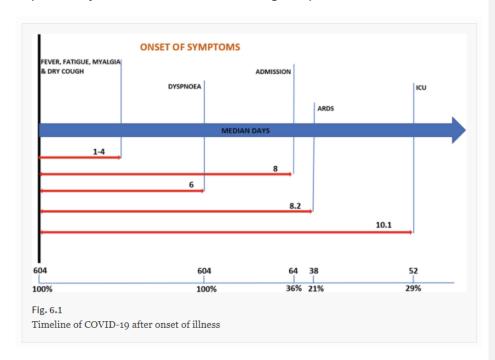
# Potentially supporting 8th December onset: Li et al. 2020

### https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7121484/

Li et al. publish the following graph of early cases, showing the first on December 8th with no link to the Hua'nan market. No further information is provided to link the case to Chen, but as their data appears to come direct from Wuhan CDC and not via the China-WHO joint report (though ultimately the data source may be the same) we include it here.



Implausibility of 8th December onset being compatible with other details



We finally note that the well-studied clinical characteristics of the progression of COVID-19 suggest that onset on December 8th and admission to hospital on the 22nd is much less plausible than onset on the 16th.

https://link.springer.com/chapter/10.1007/978-981-15-4814-7\_6

# Data in Ren et al. 2020

Ren et al. (2020) also gave an onset of Dec 16th for Chen (patient 4 in the article). Ren et al. (2020), Table 1, patient 4 (IPBCAMS-WH-03): Date of illness onset = 16-Dec-2019

# Sequence data

Below shows the sequence data for BIGD GWHABKH00000001:

https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7147275/

- 41 years old
- Male
- 16 December onset
- 22 December admission [To Wuhan Central Hospital Nanjing road]
- No market exposure

### 临床信息

年齢	41
性别	M
职业	NA
发作日期	2019-12-16
入院日期	2019-12-22
旅行史/接触史	No market exposure
严重程度	Serious
病患状态	Hospitalized
临床症状及潜伏天数	High fever(39 °C) and dry cough at the onset of the illness. He developed acute respiratory distress syndrome 7 days later

 $\underline{https://ngdc.cncb.ac.cn/ncov/genome/accession?q=GWHABKH00000001}$ 

### Other errors in the case of Mr. Chen

There are more reasons not to trust the quality of the data in the China-WHO report. The errors uncovered here are not the first errors to be found in his case. *The Washington Post* forced a correction based on mixed up sample ID's among the early cases<sup>12</sup>, probably due to the second 41 year old 'Mr. Chen. This is mentioned here to emphasise the low reliability of the data provided by the Chinese team to the WHO, further discussion is in Appendix XXXX

More	err	ors	-	Wa	shington		Post
Wrong seque	ence (see						
Wrong collec	tion date?	30thDec					
Wrong	Onset	date	[not	resolved	to	this	day]
Page		73:		main			report

Table 7. The overview of sequences from early patients (with onset date before 31 December 2019)

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name)"	Lineage
S01	EPI_ISL_40 3928	Visitor to another market		8 Dec	1 Jan 2020	7866 (ORF1a)	L/B

From: https://www.washingtonpost.com/world/asia\_pacific/covid-wuhan-outbreak-who/2021/07/15/51e7e8a6-e2c6-11eb-88c5-4fd6382c47cb\_story.html

The WHO did not explain why a map in the annexes of the WHO-China joint report appears to show the first case on one side of the Yangtze River, while the Wuhan

<sup>12</sup> https://www.washingtonpost.com/world/asia pacific/covid-wuhan-outbreak-who/2021/07/15/51e7e8a6-e2c6-11eb-88c5-4fd6382c47cb\_story.html

government had announced last year that the first patient, who fell ill Dec. 8, 2019, lived on the other side of the river, in Wuchang district.

Tarik Jasarevic, a WHO spokesman, said in an email that the agency cannot comment on what the Wuhan government announced last year, but the question of where the first-known patient lived relative to the river was not relevant to competing hypotheses about the origin of the virus. **The issue is not important**, he wrote, because "the current first known patient is most probably not the first case."

The agency confirmed that the earliest official case, Patient S01, was a 41-year-old man, with virus genome sequences EPI\_ISL\_403930, MT019531, and GWHABKH00000001 in various databases. The report had listed a different sequence, belonging to a 61-year-old man, which Jasarevic called an editing error.'

It is clear there are significant contradictions, issues and uncertainties with the data in this report in addition to those already found by the *Washington Post* and even before we begin to highlight the most significant issues.

# 3. What happened to the missing cases?

3.1. The PLA Hospital of Central Military Command

According to <u>reporting by Jennifer Zheng</u>, a Wuchang resident living near the General Hospital of the Central Military Region reported that he decided to go and buy some masks at dusk on the 31<sup>st</sup> Dec, having heard earlier of the suspected pneumonia infections thanks to the whistle-

blowing of Li Wenliang which happened the evening of the 30<sup>th</sup> and alarmed by the number of ambulances he had heard during the day (10 or so).

During his 20 minutes walk, he saw 3 ambulances going down his street towards the PLA military hospital, including two with "Jiangxia District Emergency Center" (江夏区急救中) written on the side. The address of Jiangxia Emergency Center is in Zhifang but that is likely just the ambulance dispatch site.

The resident interpreted this as meaning Jiangxia's hospital was overflowing. Alternatively it may be that the PLA hospital was pooling patients in the same way as Wuhan Jinyintan Hospital which received 7 patients on the 29<sup>th</sup> Dec, being the designated admission hospital for infectious diseases in Wuhan. This could happen as PLA hospitals (managed by the PLA but open to the public) typically have good capacity and readiness.

However these early Jiangxia's cases do not appear in any official reports (WHO, papers, etc) which is rather puzzling. So another explanation is that they were transferred to the PLA hospital in a way reminiscent to SARS-1, when military hospitals were used to hold and treat patients that never appeared in any official count and had no public hospital record.<sup>13</sup>

Let's note that if Mr Chen had not transferred on the 27<sup>th</sup> Dec from the Jingxia hospital to the Wuhan Central Hospital in the reputed emergency department managed by Ai Fen - thanks to his uncle (or aunt) who was a doctor in that very department - his case may well have never been known. He may have then just been one more case from Jiangxia transferred to the PLA hospital in the evening of the 31<sup>st</sup> Dec. As it is, on the 30<sup>th</sup> Dec it instead became the whistle-blowing case via Li Wenliang.

The same PLA military hospital of Central command is linked to 4 very early cases, including the "Founder Patients" of both Clade A and Clade B, from which every SARS-CoV-2 coronavirus that has infected every patient with COVID- 19 anywhere in the world has arisen. These BioSamples database records of these 4 cases are additionally very unusual, with Record Creation Date confirmed as of the 10<sup>th</sup> Dec, well before the stated Specimen Collection Dates.<sup>14</sup>

### **Health Times**

The official earliest onset date of the 8<sup>th</sup> was confirmed in <u>an article in the Health Times</u> (which also revealed two suspected Nov cases, including patient Su on the 17<sup>th</sup>). [there's a reference to Dec 8 in a Jan 11 article that also says no new cases detected since Jan 3. [Jinyantan record from video has Jan 2 test timestamps and implies a Dec 16 onset–Brian]

<sup>&</sup>lt;sup>13</sup> See 'SARS, Governance and the Globalization of Disease' by David P. Fidler, pages 95 and 97 for the way cases were handled in military hospitals, with secret files.

<sup>&</sup>lt;sup>14</sup> See 'Where Did the 2019 Coronavirus Pandemic Begin and How Did it Spread?' by Steven Quay, https://zenodo.org/record/4119263

On February 26, the "Wuhan Release" online account replied to the netizen "Local Extender" that the medical treatment team of Wuhan New Coronary Pneumonia Prevention and Control Headquarters had replied:

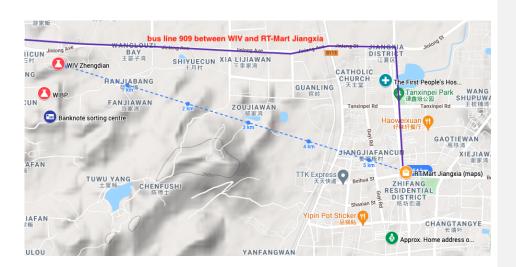
"According to the query information system, the earliest registered and reported new coronary pneumonia patient in our city was Chen. The onset time was December 8, 2019. The patient denied having been to the South China Seafood Market."

# Geography around Mr. Chen's possible Zhifang address

Map of districts and primary usage



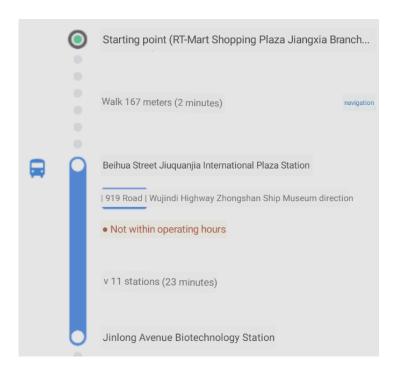
Measured distance to WIV Zhengdian site



We need to add the suspected transfer of patients from Jiangxia to the PLA hospital on the evening of the 31st after the news of a coronavirus outbreak became viral.

# Public transport from Mr. Chen's suspected address

Bus route 919 from RT-Mart to the WIV Zhengdian site







Note also the use of the colloquial nomenclature for the regions of Wuhan: Hankou for the North and Wuchang for south of the river. Mr. Chen's likely local stop would be Zhifang Avenue at the penultimate southern stop on line 7 (orange) highlighted below



# RT-Mart (大润发)

Here we present some photos of the RT-Mart in Jiangxia where Mr. Chen liked to shop. It is clear that this is not a location selling wild animals.

This RT-mart is the Jiangxia branch 大润发购物广场名烟名酒(九全嘉国际店) at the intersection of Beihua road (北华街) and Jiangxia avenue (江夏大道)

Exterior shots of the location from Baidu maps

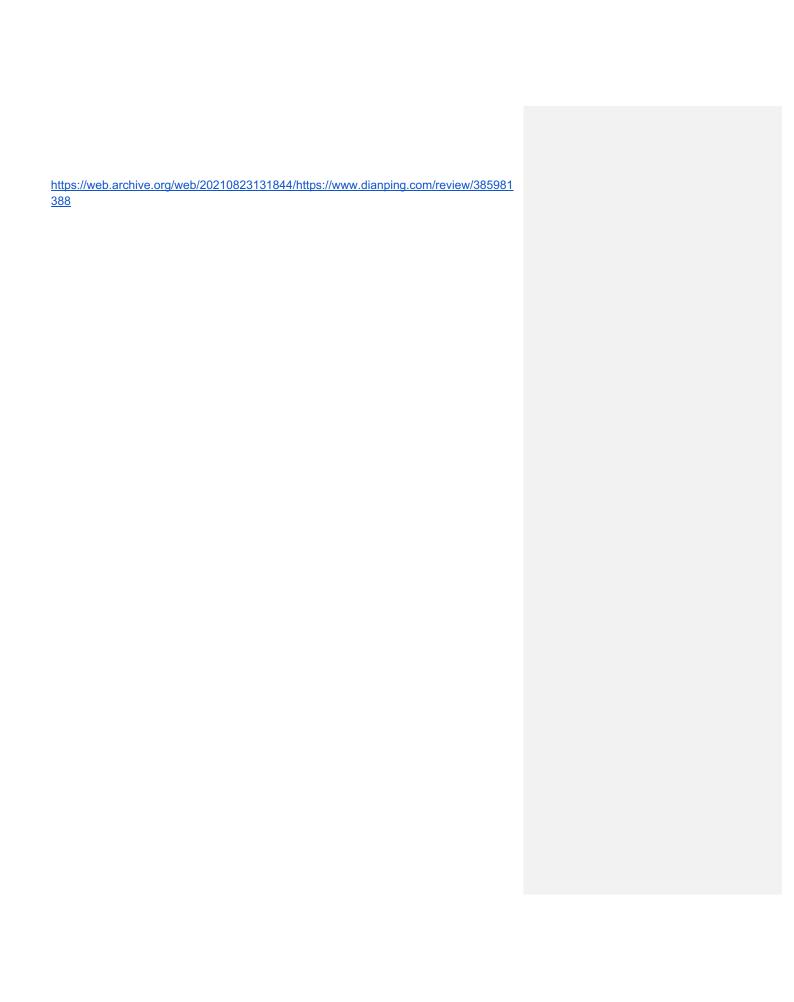


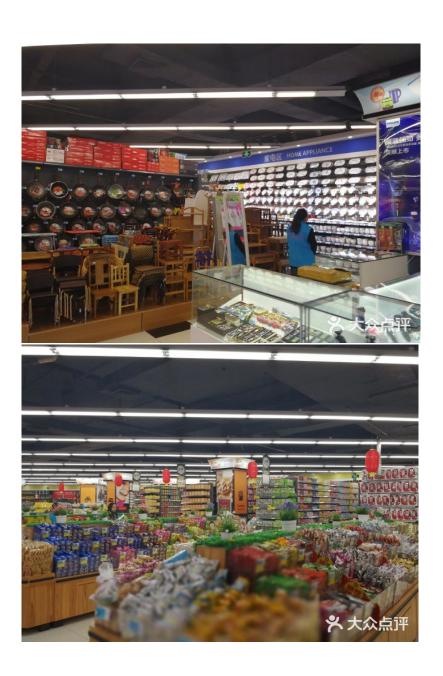
The Chinese name of the store, 大润发, can be seen in the centre

Interior shots from online reviews

Online reviews allow us to see the inside of the store and confirm the same exterior location.

https://archive.vn/UJ0wZ

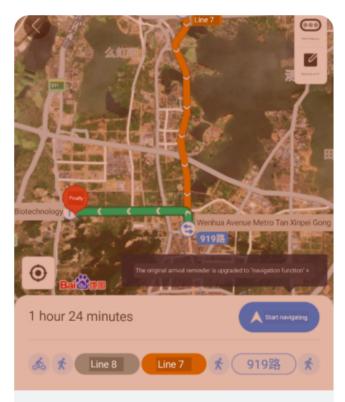












"One thing about my diagnosis is that the greatest likelihood is that I was infected on the metro"

He takes line 7 to work, probably getting on at the stop by RT-Mart. Guess which virology institute's workers transfer to the 919 bus there?!!!

## Censored interview with caijing

Live here  $\underline{\text{https://finance.sina.cn/china/gncj/2020-02-19/detail-iimxxstf2808664.d.html}} \text{ and }$ 

https://ppfocus.com/0/di5539c1a.html

## 1st sequencing

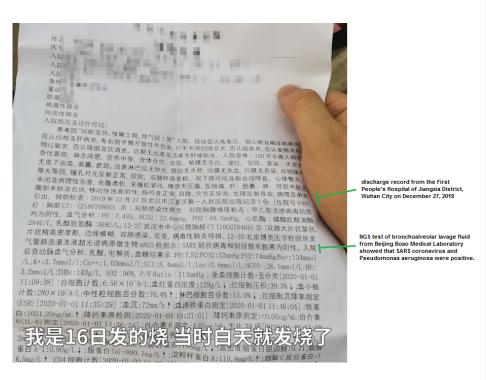
### http://www.bjnews.com.cn/detail/158044099415716.html

In his Jan 30 interview Li Wenliang is a bit confused and thinks that his SARS Wechat report comes from BGI (华大基因) and concerns a Houhu patient.

But this is not true.

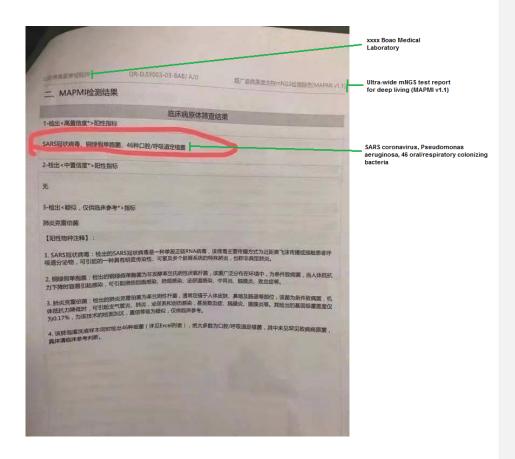
This document in thepaper's interview of Chen and Wei shows that in fact it comes from Beijing Boao laboratory and concerns 41M1 Chen accountant, transferred from Jiangxia hospital to Central Nanjing road on Dec 27.

http://cloudvideo.thepaper.cn/video/5418827c27124e78af895fd228db799c/hd/15bea2ce-195b-4e9d-a47c-f22ab1f1de25-01bdd918-3870-7c63-7436-34559f55f804.mp4#t=228



https://web.archive.org/web/20200327150640/https://github.com/Pratitya/wuhan2020-timeline/issues/118

Then see a not too bad screenshot of the viral Wechat post from leaked by Li Wenliang on Dec 30, into which we can decipher Beijing Boao medical laboratory, SARS mNGS, pseudomonas coinfection, thereby identifying 41M1 unambiguously as the patient in this document that leaked on Wechat from Li Wenliang's account.



Of course this fits perfectly with the Caixin report

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html

the Caijing article

https://web.archive.org/web/20210901195557/https://ppfocus.com/0/di5539c1a.html and the Ai Fen stories

 $\frac{\text{http://web.archive.org/web/20200326145819/https://mp.weixin.qq.com/s/1zNY2YXy75snzwX3Tg09Cq}{\text{1}}$ 

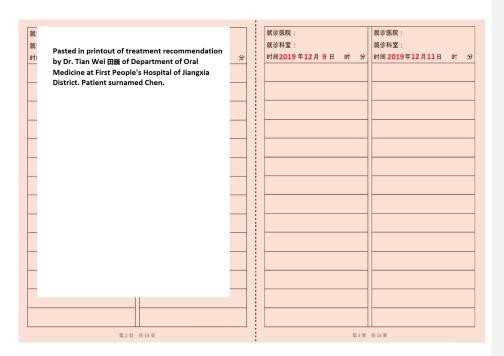
https://archive.vn/QQyLLhttps://web.archive.org/web/20210901195557/https://ppfocus.com/0/di5539c1a.html



Mention of pseudomonas in (near to SARS and mNGS)

Confirming that he is the patient whose sequencing result leaked on Wechat on Dec 30 <a href="https://web.archive.org/web/20200327191809im">https://web.archive.org/web/20200327191809im</a> /https://user-images.githubusercontent.com/60598297/75036091-fd2f3a80-54eb-11ea-988d-e93e21d25a0a.jpg

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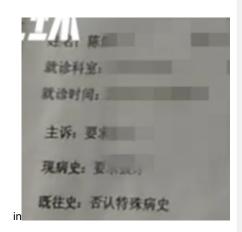
Summary of today's findings from pp. 2-3 of Chen's Outpatient Record booklet.

The booklet is a document used across multiple hospital visits. It is visible at 3:36 adn 3:46 of The Paper interview.

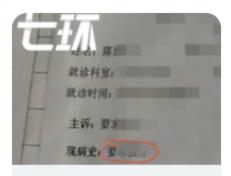
Left hand side is a treatment plan for a child's dental work, surnamed Chen, perhaps his son or daughter. It is pasted in following instructions in the front of the booklet, likely after a previous visit. Right hand side shows he had a fever of 39.5° \*on Dec 9\* and a white blood cell count of 13\*10^9/L, above normal range of 4-10. Two medications resembling Cefmetazole 头孢美唑, Cefoperazone 头孢哌酮, or Cefodizime 头孢地嗪 are legible. The right half of the right hand page records information for Dec 11.

# 北京地区医疗机构 门急诊病历手册 Outpatient and Emergency Medical Record for Hospitals and Clinics in Beijing 姓名 出生年月. 性别. (Date of Birth) (Gender) (Name) 单位或住址。 (Work Unit/Home Address) 药物过敏。 (Allergies) 在本市任何医疗机构 首诊、复诊或领取检查结果时均请出示本手册 Please bring this medical record with you in every hospital or clinic visit. 🦫 协和医生说

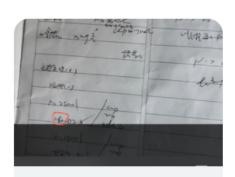
This seems to be something called an "outpatient record". A flimsy booklet where they scribble in your medical records so you can have it with you if you visit another hospital. Kid had a printout so they glued



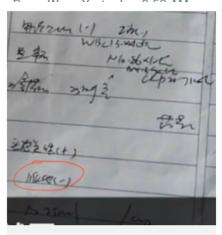
it



Looks like 要求拔牙, request for dental extraction.

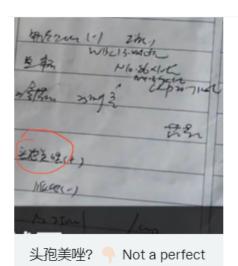


This is clearly 哌, most likely short for 头孢哌X.



For this, I suspect "头孢" as in the row above was dropped for convenience. These two characters look like 哌地. However, there is 头孢哌酮 and 头孢地嗪 but no 头孢哌地...

WBC 白细胞 10.90	75 E	- F	科		室:妇保科	
RBC 红细胞 4.00 3.5—5.5 10 <sup>12</sup> / HGB 血红蛋白 126 110—160 g/L HCT 红细胞压积 0.38 0.36—0.50 L/L MCV 红细胞平均体积 94.8 86—100 fL MCH 平均血红蛋白量 31.5 † 26—31 pg MCHC 平均血红蛋白浓度332 310—370 g/L PLT 血小板 262 100—400 10 <sup>9</sup> /L NEUT*中性细胞比率 82.2 † 45—77 % LYMPIE 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率1.7 0.5—5 % BASO% 嗜碱性粒细胞比率0.1 0—1 % NEUT#中性细胞数 8.97 † 2.0—7.7 10 <sup>9</sup> /L			结 果		参考值	单位
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MCH 平均血红蛋白量 31.5 † 26—31 pg g/L MCHC 平均血红蛋白浓度 332 310—370 g/L PLT 血小板 262 100—400 10°/L NEUT% 中性细胞比率 82.2 † 45—77 % LYMPHP 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10°/L	HCT	红细胞压积	0.38		0.36-0.50	L/L
MCHC 平均血红蛋白浓度 332 310—370 g/L PLT 血小板 262 100—400 10 <sup>9</sup> /L NEUT% 中性细胞比率 82.2 † 45—77 % LYMPH® 淋巴细胞比率 11.2 ‡ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10 <sup>9</sup> /L	MCV	红细胞平均体积	94.8		86-100	fL
PLT 血小板     262     100—400     10°/L       NEUT% 中性细胞比率     82.2     † 45—77     %       LYMPH* 淋巴细胞比率     11.2     ‡ 20—40     %       MONO% 单核细胞比率     4.8     3—10     %       EO% 嗜酸性粒细胞比率     1.7     0.5—5     %       BASO% 嗜碱性粒细胞比率     0.1     0—1     %       NEUT#     中性细胞数     8.97     † 2.0—7.7     10°/L	MCH	平均血红蛋白量	31.5	1	26-31	pg
NEUT% 中性细胞比率 82.2 † 45—77 % LYMPHP 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10°/L	MCHC	平均血红蛋白浓度	332		310-370	g/L
LYMPH <sup>®</sup> 淋巴细胞比率 11.2 ↓ 20—40 % MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10³/L			262		100-400	109/L
MONO% 单核细胞比率 4.8 3—10 % EO% 嗜酸性粒细胞比率 1.7 0.5—5 % BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT#中性细胞数 8.97 † 2.0—7.7 10³/L	NEUT%	中性细胞比率	82. 2	1	45-77	%
EO% 嗜酸性粒细胞比率 1.7	LYMPH9	淋巴细胞比率	11.2	+	20-40	%
BASO% 嗜碱性粒细胞比率 0.1 0—1 % NEUT# 中性细胞数 8.97 † 2.0—7.7 10 <sup>9</sup> /L		单核细胞比率	4.8		3-10	%
NEUT# 中性细胞数 8.97 † 2.0-7.7 10 <sup>9</sup> /L	The same				0.5-5	%
			0.1		0-1	%
			8. 97	t	2.0-7.7	109/L
LYMPH: 淋巴细胞数 1.22 0.8-4.0 109/L	LYMPH	淋巴细胞数	1. 22		0.8-4.0	109/L



match but possible.

Ct

## Cefmetazole (头孢美唑)

Cefmetazole is a cephamycin antibiotic, usually grouped with the second-generation cephalosporins. Wikipedia

ChemSpider ID: 38311

CHEMBI 14-100110

乳牙滞留

## Chen's Potential Workplace

he was an accountant for his family company"

this company is in wuhan, with 3 chens involved

 $\frac{\text{https://www.qixin.com/company/cf63a8a5-f9b6-44e7-bed0-60e574ac65c1?section=entcard https://t.co/zOgEvYv4Rq}{\text{https://t.co/zOgEvYv4Rq}}$ 

https://aiqicha.baidu.com/person?personId=58b912d46c00a393cbf9d2ca4797bcdd

^^^^^ Archive it all

one of whom is a full exact match of his unusual name, 陈宏纲

its in an industrial park north of the lake, sort of around where Connor Reed lived but not exactly

the company HQ i mean, but we know he commuted

序号	姓名	职务
1	彭涛         彭         大联企业5家 >         受益所有人	董事长
2	陈林 <b>大联企业2家</b> > 受益所有人	董事兼总经理
3	秦培 <del>美联企业1家 &gt;</del> 受益所有人	董事
4	陈	监事
5	陈二 <del> </del>	监事

Fits with "family company" and his job as an accountant

## Discu of this case:

- There are multiple significant errors and inconsistencies in data presented in the Joint China-WHO report concerning the first official case, Mr. Chen.
- We have ample evidence Mr. Chen lived in Jiangxia district, most likely in the closest residential district to the Wuhan Institute of Virology's southern location and his location is either omitted from the report entirely or improperly presented.
- There are uncertainties and errors around other important details of Mr Chen's case including date of onset, travel, animal contact and confusion with another case's details.

- It has been claimed the Chinese authorities did not trace Mr. Chen's contacts<sup>15</sup>. An interview with Mr. Chen contradicts this.
- Holmes et al. 2021, "The Origins of SARS-CoV-2: A Critical Review" lends credibility to this erroneous data and uses it to make claims about the early pandemic spread.
- We believe that errors and methodological issues in the China-WHO joint report and the Cell pre-proof negatively impact the effort to trace the pandemic origins.

<sup>15 &</sup>quot;Dansker var chef for WHO's mission til Wuhan: - Måske er nogen slet ...." 12 Aug. 2021, https://nyheder.tv2.dk/udland/2021-08-12-dansker-var-chef-for-whos-mission-til-wuhan-maaske-er-nogen-slet-ikke-interesseret. Accessed 23 Aug. 2021.

16 Holmes et al 2021, "The Origins of SARS-CoV-2: A Critical Review",

https://doi.org/10.1016/j.cell.2021.08.017

### Timing of earliest official case

There is extensive evidence showing the date of onset for Mr. Chen's case is 16th December, not the 8th December onset given in the China-WHO report.

This is another significant indication that the data is unreliable, but as this is of less direct relevance to the errors in Holmes *et al.* detailed discussion of this is in Appendix XXXX

Here we quote a summary of the evidence therein:

Summary of evidence regarding date of onset

In support of a 8th December onset:

- The China-WHO joint report
- A social media post from a Wuhan Government linked account from 26th February 2020.
- The mention of a patient with 8 December onset in Li et al.<sup>17</sup>, though it is unclear that this
  is Mr. Chen
- A possible erroneous interpretation of medical document 1 (see Appendix)

### Whereas in support of 16 December:

- Mr. Chen's interview in *The Paper*[], including audio that appears to be his own voice
  masked (full transcription in appendix [CROSSREF]) and the written text of the interview.
  This includes other details around his case that conflict with the China-WHO report such
  as mentioning no travel within half a month before onset and a trip at end of November,
  as well as no contact with wild animals.
- Two medical records (Documents 1 and 2 in Appendix[CROSSREF])[]
- Statement of Dr Su Zhao[]
- Statement of Dr Fen Ai[]
- Metadata of sequence records uploaded to XXXX[]
- Ren et al 2020[]

We believe this indicates a majority of higher-quality evidence in favour of 16th December onset. At the minimum it casts significant doubt on the data in the critically important China-WHO report, and regardless of which date of onset is correct, his case is either mapped with an inaccuracy of a minimum of 15 days or entirely omitted.

<sup>&</sup>lt;sup>17</sup> https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7121484/

### The timing of Mr. Chen's case

As well as the location of Mr. Chen's case being inaccurately represented or omitted, there are reasons to doubt the accuracy of the timing of Chen's case in the China-WHO report.

We have evidence that his date of onset in the WHO report is likely incorrect about the dates of his case these errors are repeated and built upon by Holmes et al 2021.

We believe evidence suggests Mr Chen:

- Was first symptomatic with fever 16th December 2019
- Went to Jiangxia People's Hospital near his workplace and home in Jiangxia on the same day for treatment[I think there's a reference for this somewhere]
- Was admitted to Jiangxia people's hospital on the 22nd December 2019
- Moved to Wuhan Central Hospital (Nanjing road in Jiang'an District, where a doctor was his uncle[cite]) on the 27th of December 2019
- Transferred to Jinyintan Hospital[Ren et al. (2020) https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7147275/] on 30th December 2019

We will now consider the various available sources of information.

Summary of evidence regarding Mr. Chen's residence:

In support of Wuchang residence:

- A social media post from a Wuhan Government linked account says he lived in Wuchang[], though 'Wuchang' is often used to collectively refer to all districts of Wuhan south of the river.
- Dr Su Zhao's statement that Mr. Chen is 'an accountant that lives in Wuchang' [], again the same colloquial use of 'Wuchang' to refer to all districts east of the river must be considered.

In support of Jiangxia residence:

• The Paper's clear statement that Mr. Chen lives in Jiangxia

- The China-WHO report's mention of his preference to shop at an RT-Mart in Jiangxia[]
- What appears to be a recording of Mr. Chen's own words in the audio interview with The Paper.
- The fact that Mr. Chen sought treatment 'as soon as possible'[the paper] by visiting Jiangxia people's hospital on the 16th[Dr Zhao's statement and the paper], where he was then admitted on the 22nd and discharged on the 27th (Medical Document 2, Appendix XXX)[].
- Dr Ai Fen's interview referencing the 'outer suburbs of Wuhan' would suggest Jiangxia over central Wuchang district.

Evidence strongly points to Chen's residence being in Jiangxia district.

Impact of this evidence on evaluation of China-WHO report data accuracy We now return to the maps from the China-WHO joint report annexes. As previously noted

- 1. No dot appears in Jiangxia district until the final map.
- No dot appears in Wuchang district in the 11th December map, indeed none are south
  of the river. Ambiguous points on the boundaries appear in the 16th and 21st December
  maps, and it is only in the 26th December map that points unambiguously appear in
  Wuchang.

It is therefore clear that regardless of whether Mr. Chen lived in the districts officially named Wuchang or Jiangxia, his case is not accurately represented in the maps.

We believe evidence clearly points to Mr Chen's residence being in Jiangxia district. We will consider the implications of this later.

We have highlighted major issues surrounding just one of the cases in the WHO-China joint report and demonstrated significant errors, biases and omissions in the data provided by the Chinese team. The errors detailed concern just one important case and are not the only such errors we have found.

We believe we have amply demonstrated that the China-WHO report data is of much too low quality to justify its reuse in Holmes *et al.* 2021 and that to do so in the most responsible manner possible would invalidate some of their claims.

In addition to data quality issues we propose that the methods of Holmes *et al.* are inadequate for such an important study of a critical topic. Publication of this paper in its current form in a prestigious and widely cited journal like Cell will serve to obfuscate aspects of the early spread of the pandemic and amplify misinformation through further citation.

Rather than lend credibility to the Chinese team's minimal attempt to trace early cases and collect and share data, the scientific community should be united in working to highlight, not disguise, the shortcomings of the data and demand transparency from the Chinese authorities.

Remarks: (just thoughts maybe delete)

Attempts to inform the authors of issues pre publication have been ignored

### Summary timeline of Mr. Chen's case

Based on the best available evidence we conclude Mr Chen:

- Lived in Jiangxia
- Had dental work (HIM OR KID) at Jiangxia people's hospital prior to 9<sup>th</sup> December 2019
- Returned to hospital for a prescription for fever on the 9th
- Was first symptomatic with fever 16<sup>th</sup> December 2019
- Went to Jiangxia People's Hospital near his home in Jiangxia on the same day for treatment[I think there's a reference for this somewhere]
- Was admitted to Jiangxia people's hospital on the 22<sup>nd</sup> Dec.
- Moved to Wuhan Central Hospital (Nanjing road in Jiang'an District, where Chen is the paternal nephew 侄儿 of a doctor) on the 27<sup>th</sup> Dec.
- Transferred to Jinyintan Hospital<sup>18</sup> on 30<sup>th</sup> Dec.

None of which is accurately recorded in the China-WHO joint report.

### 2.4. Importance of exact location -- this is perhaps discussion

It must be explained that Mr Chen lived in the residential district closest to the WIV (5km distant), Zhifang [reference to section with maps 8.xx] . He first went to a local hospital in Jangxia and after spending 10 days there without improving he then transferred to the Wuhan Central Hospital, as a relative was working there in the emergency department. That hospital had the largest and possibly the best emergency department in the city under the direction of a very dedicated doctor, Ai Fen. Based on his test results Ai Fen and Li Wenliang released the news of the SARS-like CoV outbreak to the world on the 30th Dec. Mr Chen's case became public knowledge and effectively triggered the disclosure of the outbreak.

He effectively was the first sequenced cases that had no connection to the market, and his case became known somewhat by chance as after 1- days of no improvement in his local hospital in Jiangxia he transferred to his relative's hospital on the other side of the river, by which time an outbreak at the market was underway by then.

Relevant issues with Holmes et al.

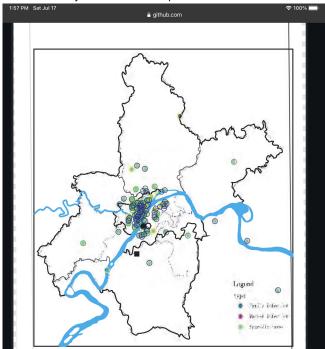
A paper published in Cell makes important errors concerning the details of Chen's case and uses these errors as a basis for some of its arguments

<sup>&</sup>lt;sup>18</sup> Ren et al. (2020) https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7147275/

#### 4.1 Methodology

Our first concern is that the authors of Holmes *et al.* extract their data from the almost illegible maps on page 156 of the China-WHO report annexes using Adobe Illustrator to make much clearer maps that disguise the data's poor provenance.

The following screenshot<sup>19</sup> was taken of the github repository for the paper while it was in preprint (screenshot taken 17-07-2021 - since taken offline and updated) showing the authors' method of tracing waterways and district boundaries and drawing circles in Adobe Illustrator on these extremely low resolution maps to extract their data:



While the authors state in their supplementary information that:

"Map data was manually extracted from Fig 17 (Page 157) of the Annexes of ref. 3 using Adobe Illustrator. Because of multiple overlapping points there will be errors in the extraction process."

No clear reference to the low quality of the data is made in the main text other than perhaps a brief allusion:

<sup>&</sup>lt;sup>19</sup> https://twitter.com/danwalker9999/status/1428888964715270148/photo/1

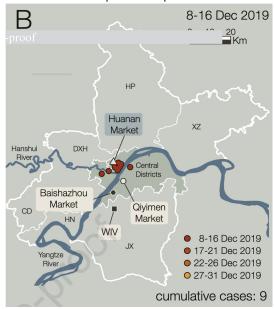
"case reporting may be subject to sampling biases reflecting the density and age structure of the population in central Wuhan, and exact location of some early cases is uncertain."

This is not an ideal basis for important claims about the origins of a pandemic in a high impact journal like *Cell*. Nor is it a transparent way to make use of such low quality data.

It is unclear if the authors have contacted the Chinese members of the joint WHO-China team to request raw data and clarification of inconsistencies.

#### 4.2 Reuse of flawed WHO data and implications

Holmes *et al.* use the low quality data they extracted from the maps in the China-WHO report Chinese annexes to produce maps such as the following.



We believe this disguises the data's very low quality as well as being erroneous, omitting Chen's

In evidence for their argument that the pandemic virus did not leak from a lab, the authors incorrectly highlight the lack of early cases near the WIV's newer Zhengdian campus, where the BSL-4 lab and one or more its BSL-3 labs are located, as marked on their map.

This is summarised concisely by one of the authors, Angela Ramussen, in her engagement with the public<sup>20</sup>, where she emphasizes the significance of lack of early cases near the Zhengdian

Commented [2]: check if it made it into final paper in this form

 $<sup>^{20}~\</sup>underline{\text{https://twitter.com/angie}}~\underline{\text{rasmussen/status/1428358363235045381?s=20}}$ 

site<sup>21</sup>. Both tweets are quoted below (the question is rhetorical and directed by Angie Ramussen to herself):

"But Angie, you can't actually answer anything conclusively about origins using just genomic sequence data!"

Good point. That's why we also employed a cutting-edge technique known as looking at a map. Geographic location is, after all, the sole piece of evidence for lab origin.

#### And

This map shows the home addresses of these early cases. They cluster around a number of markets where live animals w/ known susceptibility to SARS-CoV-2 were sold. Importantly, they are NOT close to the WIV campus where Shi Zhengli's lab is located, even as case #'s increased.

#### 4.3 Lack of consideration of other labs

We know from many statements that coronavirus work including growth of live bat coronaviruses does not take place in the BSL-4 lab but typically at BSL 2 or 3[CITATIONS daszak shi, peng... many statements and journal articles].

An example quote from Zhou Peng of Shi Zhengli's group at the WIV would seem to suggest storage and amplification at BSL-2 is preferred, which would correlate with our evidence below of the BSL-3 only recently opening<sup>22</sup>:

Zhou Peng said that the samples are usually stored in the second-level biosafety laboratory. If amplification is required, it must be carried out in a biosafety level 2 (P2) laboratory. Amplifying viruses is a bit like cultivating bacteria. The virus parasitizes in the cell, "feed" the cell, and the virus grows up.

Researchers found that there are always "new faces" in the different batches of samples collected in this bat cave. After five years, the viruses they obtained have converged into a big "reservoir."

There are multiple BSL 2 and 3 labs connected with groups active in bat coronavirus work in Wuhan. A detailed investigation of relevant labs can be found here  $^{23}$  and summary maps of key locations can be found in Appendix XXXXX

 $<sup>{\</sup>color{red}^{21}}\,\underline{\text{https://twitter.com/angie}}\,\,\underline{\text{rasmussen/status/1428358371053170694?s=20}}$ 

https://www.thepaper.cn/newsDetail\_forward\_1897724, Archived: https://archive.vn/JL8bz

Extensive details of multiple labs at several sites are given in <a href="https://www.researchgate.net/publication/350887648\_3\_WUHAN\_LABORATORIES\_BAT\_RESEARCH\_AND\_BIOSAFETY">https://www.researchgate.net/publication/350887648\_3\_WUHAN\_LABORATORIES\_BAT\_RESEARCH\_AND\_BIOSAFETY</a>

Concerning potential criticism of Holmes *et al.*, for omitting other labs from their map, Angela Ramussen has responded to another question she asked herself on twitter concerning the omission of other labs and the work at BSL-2 and 3<sup>24</sup> which we quote here:

"But Angie, the WIV location on this map is the BSL-4 lab. Shi Zhengli said bat CoV work occurred at BSL-2 and BSL-3."

Clearly you've never done anything remotely close to high containment work. Every BSL-4 lab I've ever been to also has BSL-2 and BSL-3 facilities on site.

#### And<sup>25</sup>

We also confirmed that the Shi lab is located at the BSL-4 campus, with multiple sources who have actually been to both WIV campuses and have direct firsthand knowledge of where the bat CoV work is carried out. We confirmed all locations here using GIS data from OpenStreetMaps.

Despite these assertions we have searched for evidence for which labs were open at the site. While a BSL-2 was in operation, we believe the BSL-3 lab at the WIV's Jiangxia Zhengdian site (with BSL-4) was still in the process of receiving full accreditation.



#### List of WIV lab accreditations and approvals:

- BSL-2 are provincial approval level
- BSL-3 and BSL-4 are national accreditation (by CNAS) and approval (by NHC)

01/06/2009 BSL-3 CNAS laboratory accreditation certificate "http://www.whiov.cas.cn/xwdt\_160278/zhxw2019/201911/t20191111\_5429080.html https://web.archive.org/web/20161004025816/http://cfts.whiov.ac.cn/index.asp?PUM=list&tid=2 9"

01/12/2009 BSL-3 NHC qualification to engage in activities of highly pathogenic microorganisms

http://www.whiov.cas.cn/xwdt\_160278/zhxw2019/201911/t20191111\_5429080.html

<sup>&</sup>lt;sup>24</sup> https://twitter.com/angie\_rasmussen/status/1428358374173773828?s=20

<sup>25</sup> https://twitter.com/angie\_rasmussen/status/1428358376379994119?s=20

18/06/2012 Zhengdian animal experiment center HPDST Experimental Animal Use Permit

https://baike.baidu.com/reference/4058260/f0f7GVMrLYZAv631BumLo\_dK4VJVg2BKEf Y8q9xoit\_F3m0uWXdQvmdsFugE0s9hvNSMo1Zb99JAjHfP7tkPDYkwHtuK821xjUedTbd6MUY cleqh2CYr832ET7WAzijxyr8

- 27/10/2014 Xiaohongshan ABSL-2 HPDST laboratory animal use permit http://www.whiov.cas.cn/xwdt 160278/zhxw2019/201911/t20191111 5429436.html
- 13/01/2017 Zhengdian BSL-4 CNAS National laboratory accreditation certificate https://lssf.cas.cn/lssf/whgjswaqsys/xwdt/201704/t20170419 4527768.html
- 01/08/2017 Zhengdian BSL-4 NHC qualification review of the highly pathogenic pathogen experimental activities Historical Investigation on the Construction of Wuhan National Biosafety Laboratory, By Wang Yefei and Wang Dazhou (College of Humanities, Beijing, 2018)
- 27/11/2018 Zhengdian BSL-4 CAS construction project acceptance https://www.cas.cn/sygz/201811/t20181130 4672588.shtml
- 01/12/2018 Zhengdian BSL-3 CNAS National laboratory accreditation certificate http://www.whiov.cas.cn/xwdt 160278/zhxw2019/201911/t20191111 5429866.html
- 01/01/2019 Zhengdian BSL-3 CNAS National laboratory accreditation certificate https://web.archive.org/web/20200504143815/http://www.whb.cas.cn/zt/xxgzbd/dqpp/20 2004/t20200413\_5539070.html
- 07/11/2019 Zhengdian BSL-3 NHC qualification review of the highly pathogenic pathogen experimental activities

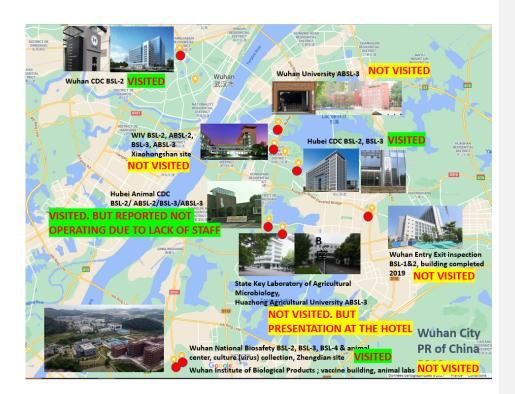
https://web.archive.org/web/20200504143815/http://www.whb.cas.cn/zt/xxgzbd/dqpp/202004/t20200413\_5539070.html

As SARS like coronaviruses are to be studied in BSL-3 in China, if WIV did study SARS like coronavirus in autumn 2019, it would have been in Wuchang site, not Jiangxia site where the BSL-3 was under approval by the National Health Commission; WHO convened team did not go to WIV Wuchang site but to the WIV Jiangxia site. Did WHO convened team visited the wrong site?

Regardless, given we know multiple labs at multiple locations in Wuhan were working with live bat coronaviruses and SARS related viruses, it would seem wholly incomplete and unjustified to only consider the Zhengdian location of the WIV.

The significance of other labs has been noted by many observers, including WHO team leader Ben Embarek<sup>26</sup> <sup>27</sup> who was especially concerned by the move of the Wuhan CDC labs to a new location a mere ~200m from the Huanan market shortly before the pandemic outbreak

The WHO has also noted the significance of the many labs in Wuhan, as reflected in the proposed terms for their second stage investigation[Anyone got the link to the proposed terms on the WHO site - I can only find media coverage like https://www.bbc.co.uk/news/world-asia-china-57926368].



<sup>&</sup>lt;sup>26</sup> "Dansker var chef for WHO's mission til Wuhan: - Måske er nogen slet ...." 12 Aug. 2021, https://nyheder.tv2.dk/udland/2021-08-12-dansker-var-chef-for-whos-mission-til-wuhan-maaske-er-nogen-slet-ikke-interesseret. Accessed 23 Aug. 2021.

<sup>&</sup>lt;sup>27</sup> https://apnews.com/article/entertainment-joe-biden-business-health-coronavirus-pandemic-986f0ff0f97af020de3b4eb3d76b23cd

6. Other criticisms of the methodology of Holmes et al.

We are concerned about further methodological issues of Holmes et al. that are unrelated to their reliance on bad data and yet are still unexpected for a prominent paper in a respected journal.

#### 6.1 Sampling bias

Holmes et al. acknowledge some possible sampling bias based on the higher population density and population of old people in the districts North of the river where the Huanan market is located:

"case reporting may be subject to sampling biases reflecting the density and age structure of the population in central Wuhan, and exact location of some early cases is uncertain."

But the authors fail to consider perhaps the most significant source of bias in early case data: The fact that contact with the Huanan market was a requirement for early case diagnosis [cite - was it a requirement or a factor]

In this regard it is perhaps serendipitous that Mr. Chen was SARS tested. Perhaps this was confusion with another Chen 41M who worked at Huanan market[cite caixin] or because his relative worked at Wuhan Central Hospital [cite Dr Su Zhao].

#### 6.2 Urban centres and superspreading events

It is often pointed out that the location of the first major outbreak of a new disease is not always the same location as the first transmission to a human [Bonus points if you can cite anything by the authors of Holmes et al], especially for a disease with significant asymptomatic spread. Furthermore the importance of superspreading events in the transmission of SARS-CoV-2 is well documented[lots to cite]. The authors of Holmes et al. are surely well aware of this.

In light of this, it is surprising that Holmes et al. choose to make the argument that the ~30km distance between the Huanan market cases and WIV Zhengdian campus constitutes meaningful

evidence that the first human transmission was not in the vicinity of the later location, especially considering the high mobility of humans in a very urbanised city with a highly developed mass rapid transport system like Wuhan. Potential translocation of spread from Jiangxia district to the Huanan market outbreak location would hardly seem implausible. When interviewed, Mr. Chen has repeatedly suggested the subway as a possible location for acquiring his infection[and the paper].

Several criticisms of other elements of Holmes et al. beyond the limited scope of this report have also been made by other authors [CITE ALINA, billys links ETC]

Necessary corrections to Holmes et al.

The very low quality and many proven inaccuracies in the data concerning early cases in the China-WHO report should render it unusable in a study making conclusions about the spread of early cases. At a minimum a very clear statement of its flaws must be made.

If Holmes *et al.* insist on using this data to produce maps, they should include the best possible information available about Chen's case. To willfully omit the first official case is unconscionable, especially since it directly contradicts claims made in the pre-proof.

The most responsible approach would be to entirely abandon using data from the China-WHO joint report to make early epidemiological conclusions due to its multiple identified flaws (indeed these flaws surrounding Chen's case are only a very select few of the flaws we have identified and we will publish more on this later). However If a location must be added for Chen, the only reasonable choice would be in Jiangxia close to the RT-Mart where he shopped and Jiangxia People's Hospital, his first point of contact for medical treatment.

A dot appearing in the final map of the China-WHO reports Chinese annexes on the 31st December apparently represents Chen. The location of this dot would seem reasonable as it is close to both Chen's supermarket and hospital, as well as the subway on which he commuted(interview with the paper, interview with WHO?)(see public transport maps in appendix)[cite that from somewhere].

Using the higher resolution, but non temporally separated map on page 148 of the Chinese report annexes and the same questionable methods of Holmes *et al.* to extract the location of this residence suggests the location shown below.





This location is in the closest residential district to the WIV BSL-3/4 laboratories. This residential location would correlate with everything we know about the details of Chen's case. As noted by *The Paper*, Zhifang, Jiangxia District is 30 km away from the Huanan Seafood market

As noted by *The Paper*, Zhifang, Jiangxia District is 30 km away from the Huanan Seafood market (on the other side of the river and which Chen never visited). Other than this large residential district the vicinity of the WIV Zhengdian location is otherwise surrounded by fields, hills and semi-industrial areas. A map of these regions can be found in Appendix XXX

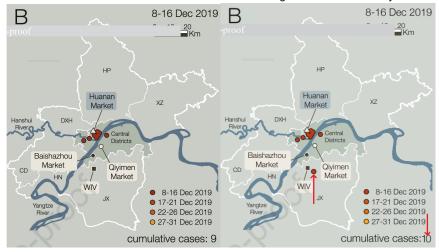
#### This location is

- only 5.5 km from the WIV Jiangxia site at Zhengdian Gold Park
- His RT-Mart branch is located at the terminus of bus line 909 to the WIV Zhengdian site.
- Other than the regular shuttle bus service from the WIV's Wuchang campus, the 909 bus is the only bus route in Wuhan that we have determined to serve the WIV Zhengdian campus. The journey time is about 20 mins.

 Zhifang metro station - most likely the closest metro station to Chen's residence and only line nearby - is the station where workers using public transport to commute to WIV's Jiangxia site transfer to the 919 bus.

Further details are provided in Appendix XXXXX.

Holmes et al. should include Chen's residence in their Figure 1B as indicated by the red arrows:



Clearly doing so would force the authors to update some of their conclusions correspondingly.

#### 6. Other criticisms of the methodology of Holmes et al.

We are concerned about further methodological issues of Holmes et al. that are unrelated to their reliance on bad data and yet are still unexpected for a prominent paper in a respected journal.

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Holmes *et al.* acknowledge some possible sampling bias based on the higher population density and population of old people in the districts North of the river where the Huanan market is located:

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It is often pointed out that the location of the first major outbreak of a new disease is not always the same location as the first transmission to a human<sup>28</sup> [Bonus points if you can cite anything by the authors of Holmes et al], especially for a disease with significant asymptomatic spread. Furthermore the importance of superspreading events in the transmission of SARS-CoV-2 is well documented[lots to cite]. The authors of Holmes *et al.* are surely well aware of this.

In light of this, it is surprising that Holmes *et al.* choose to make the argument that the ~30km distance between the Huanan market cases and WIV Zhengdian campus constitutes meaningful evidence that the first human transmission was not in the vicinity of the later location, especially considering the high mobility of humans in a very urbanised city with a highly developed mass rapid transport system like Wuhan. Potential translocation of spread from Jiangxia district to the Huanan market outbreak location would hardly seem implausible. When interviewed, Mr. Chen has repeatedly suggested the subway as a possible location for acquiring his infection<sup>29</sup>[and the paper].

<sup>&</sup>lt;sup>28</sup> A list of references concerning three well known examples can be found in Appendix XXXXXXXX

<sup>&</sup>lt;sup>29</sup> https://www.who.int/docs/default-source/coronaviruse/who-convened-global-study-of-origins-of-sars-cov-2-china-part-annexes.pdf?sfvrsn=3065bcd8\_5

Several criticisms of other elements of Holmes *et al.* beyond the limited scope of this report have also been made by other authors<sup>30</sup> <sup>31</sup> [CITE ALINA, billys links ETC]

Examples of translocated outbreaks to supesrpreading events in urban centres

#### Suggested reading:

#### Ebola in Kikwit 1995 travelled 13 miles before outbreak:

https://doi.org/10.1086%2F514306

https://www.sciencedirect.com/science/article/abs/pii/S0163834308000777?via%3Dihub

https://academic.oup.com/jid/article/179/Supplement 1/S76/882543

https://www.vanityfair.com/news/1995/08/ebola-africa-outbreak

#### SARS 1 Nov 2002 outskirts of the city to central Foshan

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3323155/

https://link.springer.com/chapter/10.1007%2F978-3-540-70962-6\_13

https://wwwnc.cdc.gov/eid/article/10/6/03-0852\_article

https://www.microbiologyresearch.org/content/journal/jgv/10.1099/jgv.0.000342

#### MERS first seen in Jeddah but emerged in outlying regions among camel traders

https://www.nejm.org/doi/10.1056/NEJMoa1211721

https://www.nationalgeographic.com/science/article/140513-mers-saudi-camels-health-

contagion-spillover-bats-disease

https://www.nejm.org/doi/10.1056/NEJMoa1408636

https://elifesciences.org/articles/31257

https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(13)70691-1/fulltext

#### With thanks to:

https://en.wikipedia.org/wiki/User\_talk:Novem\_Linguae/Essays/There\_was\_no\_lab\_leak#Urban\_settings\_as\_%22canaries\_in\_the\_viral\_pandemic\_coal\_mine%22\_

https://www.researchgate.net/publication/353305359\_Submitted\_to\_House\_Subcommittee\_on\_Investigat ions\_and\_Oversight\_Hearing\_Principles\_for\_outbreak\_investigation\_COVID-19\_and\_future\_infectious\_diseases\_Science\_Not\_Speculation\_Should\_Inform\_the\_Investig

<sup>&</sup>lt;sup>30</sup> https://ayjchan.medium.com/a-response-to-the-origins-of-sars-cov-2-a-critical-review-5d4a644d9777 (archived https://archive.ph/P3Fba)

Brief comments on Worobey's paper as regards Chen:

A recent perspective in Science beat us to publish some of these findings:[link]

The paper contains nothing DRASTIC didn't find months ago (indeed much was shared publicly but given little attention[brian, francisco]), other than perhaps a more complete translation of his dental records. While our findings (mostly?) corroborate the facts, the editorial spin towards support for a market origin in the science perspective as well as some key omissions, were disappointing. Principally we would like to clarify:

When Worobey writes:

"he had also traveled north of Huanan Market shortly before his symptoms began"

This could be interpreted to suggest he travelled somewhere in Wuhan in the vicinity of the market. In fact he had travelled to a scenic spot in the countryside - 'Mulan mountains' 90km to the North of Wuhan at the end of November. This comes from Chen's own words in the same video that Worobey transcribed. He then says that for half a month before getting sick he didn't travel anywhere. While his route and method of transportation is unknown and it is possible he passed near the market on public transportation, we feel Worobey's phrasing is too suggestive unless he knows more than we do about Chen's route.

"He believed that he may have been infected in a hospital (presumably during his dental emergency) or on the subway during his commute"

The hospital where he went for his dental appointment was Jiangxia people's hospital. This is in the South near his home in the residential district closest to the WIV BSL3/4 labs. As we describe above in CROSSREF His subway stop would likely be the same one where WIV staff change to the 919 bus.

Worobey chooses not to emphasise this aspect of the location of Chen's residence (though the blue dot is there near Hospital 8 on his map), he just says:

"Crucially, however, the now famous "earliest" COVID-19 case (1), a 41-year-old male accountant, who lived 30 km south of Huanan Market"

Overall we feel that while the facts in his article are largely correct and fit with what we have found, the selection of facts and decisions to emphasise certain points seem intended to validate his argument that the market is the pandemic origin.

While Worobey's article does have some caveats (quote sentences about there being earlier cases etc) this lack of editorial prudence has led in part to some dismal coverage in the mainstream media - in some cases declaring Worobey to have found 'patient zero' in the market. A headline surely even Worobey is disappointed with.

## Additional comment from Francisco's sheet

Ren et al. (2020)

Bronchoalveolar lavage fluid (BAL) samples were collected from five patients hospitalized with pneumonia in Wuhan Jinyintan Hospital, Wuhan, Hubei province, China from December 18 to 29, 2019

Francisco

5:24 AM Sep 4

Ren et al. (2020)

Sampling date: Dec 30, 2019

## DRASTIC017 Wuhan-Hu-1

Age&Sex 41M2
Chinese name 陈清波
Name Chen Qir

Name Chen Qingbo Type Positive

Wet market Self-employed operator

 Onset
 2019-12-20

 1st Admission
 2019-12-26

 Discharged
 2020-01-11

Death N Hospital Dec 31st Central Lineage B

Cluster

1st 27 JYT 
2nd 41 JYT 28

CN-WHO S06

ICU JYT 
WIV 
IPBCAMS-WH
HBCDC-HB
WH 
IME-WH

IVDC 
WH190 -

WHU

Other Wuhan-Hu-1

```
GISAID
                   EPI_ISL_402125
GW
NMDC
CNGB
BioProject
                   PRJNA603194
SRP/CRA
                   SRP245409
SRR/CRR
                   SRR10971381
SAM
                   SAMN13922059
Notes
                   from Meixi Village, Quanzhou, Fujian 25.1235N, 118.538E
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
2019-12-14
2019-12-15
2019-12-16
2019-12-17
2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
2019-12-24
2019-12-25
2019-12-26
                   Central
2019-12-27
                   Central
2019-12-28
                   Central
2019-12-29
                   Central
2019-12-30
                   Central (ICU)
2019-12-31
                   Central
2020-01-01
                   Central
2020-01-02
                   Jinyintan
2020-01-03
                   Jinyintan
```

MN908947, NC\_045512

Genbank

```
2020-01-04
                   Jinyintan
2020-01-05
                   Jinyintan
2020-01-06
                   Jinyintan
2020-01-07
                   Jinyintan
                   Jinyintan
2020-01-08
                   Jinyintan
2020-01-09
                   Jinyintan
2020-01-10
2020-01-11
                   Jinyintan (Discharge)
2020-01-12
2020-01-13
2020-01-14
2020-01-15
2020-01-16
2020-01-17
2020-01-18
2020-01-19
2020-01-20
2020-01-21
2020-01-22
2020-01-23
2020-01-24
2020-01-25
2020-01-26
2020-01-27
2020-01-28
2020-01-29
2020-01-30
2020-01-31
check
```

Linked cases:

## References for the above summary:

Interviewed in <a href="https://youtu.be/mCT2fp7QLIE?t=536">https://youtu.be/mCT2fp7QLIE?t=536</a> onset, admission match and the CT scan he shows is the same as in the Wuhan-Hu-1 paper.

Donating blood plasma in February



Also in  $\underline{\text{http://www.xinhuanet.com/politics/2020-02/18/c\_1125590703.htm}} \ \ \text{he} \ \ \text{had} \ \ \text{already recovered on Feb 18 2020}$ 



https://rmh.pdnews.cn/Pc/ArtInfoApi/article?id=11624772



Coroldo insights: he could really have changed his job position, from working everyday in the market at East 9th 5 to having abandoned this stall and coming everyday at the market to buy/sell seafood not specifically on East side, which would explain why he isn't in the WHO maps, why they says "At the end of 2015, Chen Qingbo transferred the store in the Huanan Seafood Market and opened a vegetable wholesale store in Wuchang. At the same time, he still drives to the Huanan Seafood Market every morning to pick up the goods and deliver them to the restaurants in need." and why <a href="https://qzwb.com/gb/content/2020-">https://qzwb.com/gb/content/2020-</a>

<u>02/21/content 7022212.htm</u> says "He <u>used</u> to run an aquatic business in the Huanan Seafood Market in Wuhan"

His (perhaps former) stall <a href="https://aiqicha.baidu.com/company\_detail\_16136339456296">https://www.kanzhun.com/firm/info/1XN-3dq7FVU~.html?ka=com\_list\_company\_title</a> (phone 13971464878) <a href="https://mip.czvv.com/company/52774984.html">https://mip.czvv.com/company/52774984.html</a> is East 9th street, No 5, aquatic products, which doesn't include any case on the WHO maps (note that there is one dot at West 9th 5 but not at the expected date).

https://www.linkedin.com/in/%E6%B8%85%E6%B3%A2-%E9%99%88-2659bb137/

Mentions together Chen Qingbo (his name), Xinlong Aquatic Products (the name of the stall) and Quanzhou (where he was born in Fujian).

His weibo account https://weibo.com/p/1005057418698631/home

Second company, Xinlong Special Vegetable Management Department, Wuchang <a href="https://www.kanzhun.com/firm/info/1HF">https://www.kanzhun.com/firm/info/1HF</a> 3Nu9GFI~.html

Two address registered for his new vegetable business in Nov 2018 is in same area of Wuchang:

https://aiqicha.baidu.com/m/detail?pid=14794178593325&VNK=bec39ade

武汉市武昌区宏祥路竹园平房门面29-31号

There's a Bamboo Garden 竹园 building in Hongxiang subdistrict in Wuchang but I couldn't find a sign for his business in Baidu street view. Worth another search—100+ businesses

Many results when searching his name. <a href="https://www.qzwb.com/gb/content/2020-02/21/content">https://www.qzwb.com/gb/content/2020-02/21/content</a> 7022212.htm

https://www.itv.com/news/2020-04-09/coronavirus-the-wuhan-market-where-the-pandemic-started

https://webapi.varys.guwu121.com/articles/detailU?id=cc8fe0f5563f48de8a428ae92a44ff88 "the aquatic business run by his family"

Most detailed story http://vertical.591adb.cn/journal/article\_wqid\_3138577.html https://www.fx361.com/page/2020/0525/6694790.shtml

He was born in 1978, in 2020 he is often said to be 42 year old.

With his wife Xu Lianggu "the young couple rented a shop in Hankou Huanan seafood market to sell seafood"

At the end of 2015, Chen Qingbo transferred the store in the Huanan Seafood Market and opened a vegetable wholesale store in Wuchang.

Several documents in <a href="http://www.taihainet.com/news/fujian/gcdt/2020-03-24/2368537.html">http://www.taihainet.com/news/fujian/gcdt/2020-03-24/2368537.html</a> including one suggesting he was born in October 1978.

Several videos <a href="https://www.sohu.com/a/374064352">https://www.sohu.com/a/374064352</a> 795821
<a href="https://haokan.baidu.com/v?pd=wisenatural&vid=5143952167784422760">https://www.youtube.com/v?pd=wisenatural&vid=5143952167784422760</a> https://www.youtube.com/watch?v=OSLiyv6bUak

http://qz.fjsen.com/wap/2020-02/18/content\_30176615\_0.htm agreees that he was discharded on Jan 11

He was mentioned in a May 2020 Der Spiegel article available at

https://www.spiegel.de/international/world/a-failed-deception-the-early-days-of-the-coronavirus-outbreak-in-wuhan-a-70effc1e-0200-440f-bb62-07cda261de11

He had been up since 5 a.m. and had already made deliveries to his primary customers, including a number of hotels and restaurants in the Chinese metropolis of Wuhan.

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html Caxin report (Chen 41M Wuhan-Hu-1 from Houhu branch and self-employee)

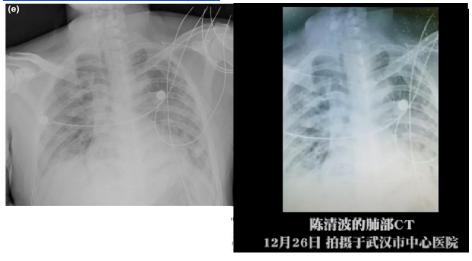
## **CN-WHO Report**

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
S06	MN908947 <sup>c</sup>	Purchaser		20 Dec	30 Dec	0	L/B

Chen Qingbo's CT scan in the First Level Response movie is the same as in the Wuhan-Hu-1 paper

http://cov2.free.fr/Covid-FirstLevelResponse/



#### Additional information about this case:

The Wuhan-Hu-1 paper <a href="https://www.thelancet.com/cms/10.1016/S0140-6736(20)32656-8/attachment/2a67fd00-0525-4528-b4ed-944c31313f8c/mmc1.pdf">https://www.thelancet.com/cms/10.1016/S0140-6736(20)32656-8/attachment/2a67fd00-0525-4528-b4ed-944c31313f8c/mmc1.pdf</a>

While the patient might have had contact with wild animals at the market, he recalled no exposure to live poultry.

# This is same copy pasted from DRASTIC016 -- rework to detail key points about this second Chen - not just how he relates to the other

This second 41 year old man played a significant role in the early days of the pandemic as the source of the first sequence Wuhan-Hu-1[Wu et al. (2020)

https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7094943/], embargoed until 11-Jan-20 then leaked to the world by Zhang Yongzhen (Fudan) and Edward Holmes (Sydney University and first author of Holmes *et al.* 2021, the topic of this report).

Another case sample from Wuhan Central Hospital came from the Houhu District, which is also adjacent to the South China Seafood Market, and was admitted a day earlier. The patient's surname is Chen, who is a 41-year-old self-employed seafood market operator from Quanzhou, Fujian. On December 20, he developed a high fever of 40°C, body aches and fatigue, coughing with purulent sputum, chest tightness, and shortness of breath. He was hospitalized in the Houhu district of Wuhan Central Hospital for "fever investigation, lung infection". On December 30, the hospital took a bronchoscopy to sample him. An extraOne more sample of the airway lavage fluid was left in the freezer at -80° C environment preservation.

"The reason for keeping an extra sample is that we have been cooperating with Shanghai Public Health Clinical Center of Fudan University (hereinafter referred to as Shanghai Public Health Center), Wuhan Center for Disease Control and Prevention, etc., and there have been major national scientific and technological projects' Main Natural Epidemic Viruses in China The cooperation agreement has been signed for five consecutive years. The Wuhan CDC is responsible for the collection of clinical and environmental samples in the Central China area, and regularly sends them to the Shanghai Public Health Center for pathogen testing. Their third level biosafetyThey have biosafety The third-level (BSL-3) laboratory has a high-throughput sequencing and bioinformatics analysis platform, and our hospital is a sentinel hospital of the Wuhan Centers for Disease Control and Prevention." Professor Zhao Su, Department of Respiratory Medicine, Wuhan Central Hospital introduced.

On the afternoon of December 30, the sample was taken by a chief physician of the Wuhan Center for Disease Control and Prevention. On January 2, another researcher from the Wuhan Center for Disease Control and Prevention wrapped the samples in dry ice in foam and metal packaging, iron boxes, and foam boxes, and transported them to Shanghai by express railway along with other animal specimens. On January 3, the team of Professor Zhang Yongzhen from the Shanghai Public Health Clinical Center received the sample. The center belongs to Fudan University. Zhang Yongzhen himself is a researcher at the Institute of Infectious Disease Control and Prevention of the Chinese Center for Disease Control and Prevention. Under the funding of key research and development projects, it is engaged in research work such as zoonotic diseases and the investigation of virus resources of major natural epidemic sources in China. Many hospitals including Wuhan Central Hospital, Wuhan Center for Disease Control and the University of Sydney, Australia, etc. As a member of the project team.

In the early morning of January 5, Zhang Yongzhen's research team detected a new SARS-like coronavirus from the samples, and obtained the virus's entire genome sequence through high-throughput sequencing; the evolutionary tree drawn from the sequencing data also confirmed the Wuhan new coronavirus Viruses have never existed before in history. The Shanghai Public Health Center immediately reported to the Shanghai Municipal Health Commission and the National Health Commission and other competent authorities on the same day, reminding them that the new virus is of the same origin as SARS and should be transmitted through the respiratory tract. It is recommended that appropriate disease control and epidemic prevention measures be taken in public places. On January 6, the China Centers for Disease Control and Prevention initiated a secondary emergency response.

#### In fact, that is what happened:

- 41M1 Chen --> IPBCAMS-WH-03 Wuchang (colloquial-really Jiangxia) accountant, Jiangxia-Central-Jinyintan
- 41M2 Chen --> Wuhan-Hu-1 wet market operator, Central-Jinyintan
   I do not rule out Caixin made a mistake with 41M2 calling him Chen (unique source telling his surname)

#### More discussion here

https://twitter.com/franciscodeasis/status/1415826311742955523

This was basis for correction pushed by WAPO?

Discussion of this case:

## DRASTIC018

Age&Sex 41M3 Chinese name 张XX XX Zhang Name Туре Positive Wet market Shopper 2019-12-23 Onset 1st Admission 2019-12-29 2020-01-15 Discharged Death Ν

Hospital Dec 31st Tongji Lineage Cluster 1st 27 JYT 7 2nd 41 JYT 7 CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** 

WH190 WH19053

 WHU

 Other

 Genbank

 GISAID

 GW

 NMDC

 CNGB

BioProject PRJCA002202, PRJNA605907

SRP/CRA CRA002334, CRA002475, SRP248092

SAM SAMC134556, SAMN14081564 Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 Clinic 2019-12-24 2019-12-25 Clinic 2019-12-26 Clinic 2019-12-27 Tongji 2019-12-28 Home 2019-12-29 Tongji 2019-12-30 Tongji 2019-12-31 Tongji 2020-01-01 Jinyintan 2020-01-02 Jinyintan 2020-01-03 Jinyintan 2020-01-04 Jinyintan 2020-01-05 Jinyintan 2020-01-06 Jinyintan 2020-01-07 Jinyintan 2020-01-08 Jinyintan 2020-01-09 Jinyintan 2020-01-10 Jinyintan

CRR116155, CRR125934, CRR125942, SRR11059940

SRR/CRR

2020-01-11	Jinyintar
2020-01-12	Jinyintar
2020-01-13	Jinyintar
2020-01-14	Jinyintar
2020-01-15	Jinyintar
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

References for the above summary:

WH19053 is known to be a different 41M from the supplementary table 1 of <a href="https://academic.oup.com/cid/article/71/15/713/5780800#supplementary-data">https://academic.oup.com/cid/article/71/15/713/5780800#supplementary-data</a>

Supplement	ary table 1.	Demograp	hic and Clinical i	nformation of all sample	S.	
IDIDIDIDI	Gender	Age	Clinical lab	Days after onset	ICU	Outcome
S1	female	49	Negative	8	N	Recovered
S2	female	52	Negative	8	Y	Recovered
S3	male	40	Negative	15	Y	Recovered
S4	male	61	Negative	12	Y	Deceased
S5	male	40	Negative	8	N	Recovered
S6	male	56	Negative	10	Y	Recovered
<b>S</b> 7	female	53	Negative	7	N	Recovered
S8	male	41	Negative	4	N	Recovered

Days after onset certainly refers to the collection date, said to be Dec 30 (but Jan 1 would make more sense).

https://www.ncbi.nlm.nih.gov/biosample/14081564

The dates and severity are compatible with a 41M3 patient from Tongji then Jinyintan whose wife talked to many journalists:

WSJ early coronavirus missteps <a href="https://archive.md/9a5jm">https://archive.md/9a5jm</a>

Among those transferred to Jinyintan was a 41-year-old man who regularly shopped at the Hua'nan market and had gone to his local clinic after developing a fever and coughing up blood on Dec. 23, his wife said in an interview on Feb. 18.

He had been in Tongji Hospital since Dec. 27. After doctors there took a chest scan, they began to wear masks and protective gear, and placed him in quarantine, his wife said. He was put in an almost empty ward at Jinyintan on Dec. 31.

He is likely the patient in this article

https://finance.sina.com.cn/wm/2020-01-22/doc-iihnzhha4186239.shtml

Shopper, Dec 23 date, Transferred to Jinyintan on Dec 31, put in isolation, story told by his wife

#### https://new.gq.com/omn/20200103/20200103A00QPZ00.html?pc

Another family member, Ms. Huang, told the Southern Weekend reporter that her husband was transferred from Tongji Hospital to Jinyintan Hospital on January 1, when his body temperature was 39 to 40 degrees. She introduced that her husband, who is 41 years old this year, is also purchasing seafood from the Huanan Seafood Wholesale Market for the hotel. This is his second year of seafood purchasing. My husband has always been in good health. He didn't pay much attention to the fever at first, but went to a "not very good" small hospital to see a doctor. After taking medicine for four days, the fever did not subside, so he went to Tongji Hospital for a registered examination and was diagnosed with "pulmonary disease". External infection", requiring isolation and "intensive treatment".

#### https://news.sina.cn/2020-01-02/detail-iihnzhfz9888024.d.html

Ms. Huang, a family member of the patient, told Jiemian News that her husband, who is 40 years old this year (age mismatch), also does hotel purchases. He had a fever for a week last month, and he did not eat during that time. At first, he was treated in a small hospital nearby. Later, he

was transferred to Tongji Hospital. After checking the blood picture, he was diagnosed with pneumonia. "The doctor in Tongji Hospital asked very detailed questions, and the CDC also participated." Afterwards, the patient was hospitalized in Tongji Hospital for two days. "The doctor said that there is no special medicine, and we are also very anxious." Ms. Huang said that on January 1, the doctor of the Respiratory Department of Tongji Hospital said that he would like to focus on treatment, and then the patient was transferred to Jinyintan Hospital. , "The fever was 40 degrees when it was delivered."

## https://www.sohu.com/a/368767944 116237 and https://news.sina.com.cn/c/2020-01-24/doc-iihnzahk6160793.shtml

Mr. Zhang, the owner of a restaurant in Wuhan who often goes to the market to purchase goods, was the first infected person. "Cough, I have a fever every day." Mr. Zhang's wife, Ms. Huang, remembers that the hospital was treated for colds at first, but his condition did not improve. The husband was sent to Wuhan Tongji Hospital, and when the lung CT came out, he was isolated. On the afternoon of December 31, Mr. Zhang was transferred to Wuhan Jinyintan Hospital and was completely isolated. Ms. Huang could only make a video call with her husband. "The doctor said that my husband was infected with a disease similar to SARS."

#### https://baijiahao.baidu.com/s?id=1654845412197587426&wfr=spider&for=pc

"Side Dish Brother" often goes to the seafood market to buy goods almost every day her husband started to have a fever on December 23, 2019. He started to have a fever for three days and was treated in a small clinic. On the fourth day, he went to the Tongji Hospital affiliated to Tongji Medical College of Huazhong University of Science and Technology for a blood test. The blood items and white blood cells were both declining. , the fever reached a maximum of 41 degrees Celsius during hospitalization, and the body temperature did not drop significantly for a period of treatment. On the morning of January 1, 2020, I had a fever of around 40 degrees Celsius. After the injection from Tongji Hospital, I was transferred to the sixth floor of Jinyintan Hospital in the afternoon. There was no obvious fever when I was transferred, but I didn't eat well for more than a week. Yellowing.

#### http://www.bjnews.com.cn/detail/157974797415804.html

Wang Si's wife Liu Hua introduced to the Beijing News reporter that her husband had purchased goods from the South China Seafood Market. He developed fever symptoms around December 28, 2019, and was hospitalized in Wuhan Tongji Hospital. On December 31, he was transferred to Wuhan Jinyintan Hospital. until discharged from the hospital.

My husband is usually in good health and rarely gets sick. This illness was a flu-like symptom from the very beginning. (2019) On December 24, we saw a doctor at a community clinic near our home. The doctor ordered an infusion and took medicine together. Three or four days later, he suddenly developed a fever with a body temperature of 38.5°C. About December 28, we decided to go to Wuhan Tongji Hospital to see a doctor. When I saw a doctor, the doctor asked me to check the blood. The condition was very bad, and the platelet and white blood cell indexes were abnormal. The doctor told us that we needed to be hospitalized. At that time, he had a cough and fever, and he was exhausted.

After the results came out, the doctor asked where we had been. I said a few places, and finally confirmed whether we had been to the Huanan Seafood Market. I was wondering how the doctor knew he had been there. I told the doctor truthfully that he went there to buy goods, just bought some vegetables and meat, and the fresh ones were nothing special. The live animals were bullfrogs and shrimps.

### Additional information about this case:

### Discussion of this case:

#### Notes from Francisco

#### Francisco

5:24 AM Sep 4

"blood test"

WSJ: Tongji since 27-Dec-19

#### Francisco

5:24 AM Sep 4

61M serves restaurants, and 41M3 buys for a restaurant. Also WH19053 clusters with IPBCAMS-WH-05/2020

#### Francisco

5:24 AM Sep 4

WSJ seems to suggest transfer on 31-Dec-19

#### Francisco

5:24 AM Sep 4

Ren et al. (2020)

## DRASTIC019 Chen Sanhong

Age&Sex 42M Chinese name 陈三红

Name Chen Sanhong son of 70F(Qiu Fenglan)

Type Positive
Wet market Vendor
Onset 2019-12-24
1st Admission 2019-12-28

Discharged Death Hospital Dec 31st Lineage Cluster 9 1st 27 JYT 2nd 41 JYT 9 CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW **NMDC CNGB** BioProject SRP/CRA SRR/CRR

SAM	-
Notes	-
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
2019-12-05	-
2019-12-06	_
2019-12-07	_
2019-12-08	_
2019-12-09	_
2019-12-10	_
2019-12-10	
2019-12-12	
2019-12-13	_
2019-12-13	-
2019-12-14	-
2019-12-15	-
	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	Central
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-

2020-01-12 2020-01-13 2020-01-14 2020-01-15 2020-01-16 2020-01-17 2020-01-18 2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check

Linked cases:

The mother **DRASTIC054** Qiu Fenglan

## References for the above summary:

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
9	江岸区	男42	售卖白条鸡
	Jiang'an	Male	sells prepared chickens

From the Wuhan-Hu-1 preprint on the 7 Central (Houhu district) market related patients <a href="https://www.biorxiv.org/content/10.1101/2020.01.24.919183v2.full.pdf">https://www.biorxiv.org/content/10.1101/2020.01.24.919183v2.full.pdf</a>

#### 477 Table 1. Clinical symptoms and patient data

Characteristic	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6	Patient 7
Age (Year)	41	44	42	70	31	51	43
Sex	M	F	M	F	M	M	M
Date of illness onset	Dec 20,2019	Dec 22,2019	Dec 24,2019	Dec 24,2019	Dec 21,2019	Dec 16,2109	Dec 14,2019
Date of admission	Dec 26,2019	Dec 22,2019	Dec 28,2019	Dec 28,2019	Dec 28,2019	Dec 27,2019	Dec 14,2019
Fever	+	+	+	+	+	+	+
Body Temperature (°C)	38.4	37.3	39	37.9	38.7	37.2	38
Cough	+	+	+	+	+	+	+
Sputum Production	+	+	-		-	-	+
Dizzy	+	-	+	+	-	+	-
Weakness	+	-	+			-	-
Chest tightness	+	-	-	+	+	-	-
Dyspnea	+	-	-	+	+	+	-
Bacterial culture			strepto coccus pneumoniae	streptococcus pneumoniae	-	-	streptococcus pneumoniae
Gluco corticoid therapy	No	No	Yes	Yes	Yes	Yes	No
Antibiotic therapy	Cefoselis	Ceftazidime, Levofloxacin	Cefminox	Cefminox, moxifloxacin	Cefminox	No	No
Antiviral therapy	Oseltamivir	No	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	No
Oxygen therapy	mechanical ventilation	No	No	Mask	No	No	No

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Additional information about this case:

#### Discussion of this case:

<u>https://archive.ph/wqtCY</u> discusses the mother and son cluster and tells us that the mother was hospitalized first and that the son sells poultry, both hospitalized in Houhu.

Also all the Houhu patients are in the paper's overlay. Only one sells poultry, 42M, and he is next to the mother (70F) as expected for a cluster.

70F is identified unambiguously because in the stories she is said to be hospitalized in Houhu, only two women and the 44F is too young, and to deliver meals to her son, which matches the thepaper's overlay.

The name of the mother and son are in the Dec 30 Wuhan-Hubei CDC non-public document <a href="https://justpaste.it/9r4rm">https://justpaste.it/9r4rm</a> including the name Chen Sanhong (陈三红).

Now that we identified Wuhan-Hu-1 we know they are different Chen.

Mother & son cluster mentioned in <a href="http://zhishifenzi.blog.caixin.com/archives/221847">http://zhishifenzi.blog.caixin.com/archives/221847</a>

https://matters.news/@2020Era/%E5%8F%91%E5%93%A8%E5%AD%90%E7%9A%84%E4%BA%BA-bafyreihrpvzudkmtakoxvquhhw75ajqvhkn4oxb4pges3od5rqusa436ba (the mother, delivering meals)

The main mismatch is that Caixin report says that 41M2 Wuhan-Hu-1 is named Chen as well <a href="https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html">https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html</a>

http://web.archive.org/web/20200326145819/https://mp.weixin.qq.com/s/1zNY2YXy75snzwX3T g09Cg (mother and son, likely Houhu district, The son worked in the Huanan Seafood Market. The mother went to the seafood market to deliver meals. She had never touched any items in the Huanan Seafood Market, but she was still sick and was in a serious condition )

Department of Pulmonary and Critical Care Medicine, The Central Hospital of Wuhan, China <a href="https://www.ncbi.nlm.nih.gov/sra/SRR10971381">https://www.ncbi.nlm.nih.gov/sra/SRR10971381</a> in the metadata (full xml download) it is said to be from "Department of Pulmonary and Critical Care Medicine, The Central Hospital of Wuhan, China" see also the Central hospital authors of the Wuhan-Hu-1 paper. <a href="https://www.biorxiv.org/content/10.1101/2020.01.24.919183v2.full.pdf">https://www.biorxiv.org/content/10.1101/2020.01.24.919183v2.full.pdf</a> the Wuhan-Hu-1 preprint includes a table

477 Table 1. Clinical symptoms and patient data

Characteristic	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6	Patient 7
Age (Year)	41	44	42	70	31	51	43
Sex	M	F	M	F	M	M	M
Date of illness onset	Dec 20,2019	Dec 22,2019	Dec 24,2019	Dec 24,2019	Dec 21,2019	Dec 16,2109	Dec 14,2019
Date of admission	Dec 26,2019	Dec 22,2019	Dec 28,2019	Dec 28,2019	Dec 28,2019	Dec 27,2019	Dec 14,2019
Fever	+	+	+	+	+	+	+
Body Temperature (°C)	38.4	37.3	39	37.9	38.7	37.2	38
Cough	+	+	+	+	+	+	+
Sputum Production	+	+				-	+
Dizzy	+	-	+	+	-	+	-
Weakness	+	-	+		-	-	-
Chest tightness	+	2		+	+	12	20
Dyspnea	+		-	+	+	+	
Bacterial culture	-		streptococcus pneumoniae	streptococcus pneumoniae			streptococcu
Glucocorticoid therapy	No	No	Yes	Yes	Yes	Yes	No
Antibiotic therapy	Cefoselis	Ceftazidime, Levofloxacin	Cefminox	Cefminox, moxifloxacin	Cefminox	No	No
Antiviral therapy	Oseltamivir	No	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	No
Oxygen therapy	mechanical ventilation	No	No	Mask	No	No	No

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I think we have one more Chen, 42M, the son of the mother and son cluster. This cluster was in central, Houhu

- 42M and 70F are in the Wuhan-Hu-1 preprint on central Houhu patients.
- The mother is said to bring food to her son.
- 42M and 70F are #9 and #10 in the paper's overlay

- 70F "Gives food to her son" while 42M "sells prepared chickens"
- a patient hospitalized for something else tells the Houhu story and brings the important info that the son was hospitalized after his mother (so the son can't be 41M2 Wuhan-Hu-1) and that he sells poultry (once again it can't be 41M2)
- In the paper overlay the other cluster 50M 49M 48F 78M is #21 #22 #23 #24 --> the patients are grouped by cluster <a href="https://justpaste.it/6abiv">https://justpaste.it/6abiv</a>

## DRASTIC020

Age&Sex 43M Chinese name XXX

Name XX X appears to have 3 character name

Type Positive

Wet market Visitor (or worker?)
Onset 2019-12-14 not sure
1st Admission 2019-12-14 not sure

Discharged - Death -

Hospital Dec 31st Tongji (?)

Lineage B

Cluster

 1st 27 JYT
 16

 2nd 41 JYT
 16

 CN-WHO

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

 WH
 WH02

WH WH IME-WH IVDC WH190 WHU Other -

Genbank LR757997 GISAID EPI\_ISL\_406799

```
NMDC
                   NMDC60013002-02
CNGB
                   CNA0007333
BioProject
                   CNP0000881, PRJEB36487, PRJCA008874
SRP/CRA
                   CRA006587
SRR/CRR
                   CRR456588 to CRR456597
                   CNS0191793, SAMEA6507891, SAMC703647
SAM
Notes
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
2019-12-14
                   Central
2019-12-15
2019-12-16
2019-12-17
2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
2019-12-28
2019-12-29
                   Central as outpatient
2019-12-30
2019-12-31
                   Tongji (?)
2020-01-01
2020-01-02
2020-01-03
2020-01-04
2020-01-05
```

GW

2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

# Linked cases:

# References for the above summary:

Take a look at Holmes email to @babarlelephant explaining that this patient went two times in Central 2 weeks apart, which doesn't fit well with the hypothesis that he is among the earliest cases. <a href="https://justpaste.it/3jxu8">https://justpaste.it/3jxu8</a>

# We are mixing 3 different sources here without strong match:

Thepaper's overlay, Gisaid Wuhan/WH02, the Wuhan-Hu-1 preprint patient table.

#### https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
16	江岸区	男43	工人:配送 水产品
	Jiang'an	Male	Worker: Distribution of aquatic products

### Additional information about this case:

<u>The gisaid entry</u> says "General Hospital of Central Theater Command of People's Liberation Army of China" for the originating lab but it is likely not true, see 44M.

The paper <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159086/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159086/</a> says ""We report the epidemiological data of nine inpatients, from at least three hospitals in Wuhan", while the authors of the paper are from BGI, IVDC, Shandong and PLA, so not all the patients come from PLA.. Note: By GPS coordinates, the hospitals are Zhongnan, PLA, and Tongji/Union. Tongji and Union are too close together to tell by GPS.

This paper proves Zhongnan as one of the hospitals - WH03 <a href="https://pubmed.ncbi.nlm.nih.gov/32020836/">https://pubmed.ncbi.nlm.nih.gov/32020836/</a>

#### Wuhan/WH02

https://ngdc.cncb.ac.cn/ncov/genome/accession?q=CNA0007333 says "The patient had visited to the seafood wholesale market"

https://www.ncbi.nlm.nih.gov/biosample/SAMEA6507891 says 43M

The <u>Wuhan-Hu-1 preprint</u> (not the article) includes a patient table (market-linked,unclear if confirmed, from Wuhan Central hospital Houhu district) with a 43M (very early hospitalization: Dec 14). It is likely the same patient because 6 or the 7 patients are in thepaper's overlay (41M would be in the 1-8 part of the overlay).

Characteristic	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6	Patient 7
Age (Year)	41	44	42	70	31	51	43
Sex	M	F	M	F	M	M	M
Date of illness onset	Dec 20,2019	Dec 22,2019	Dec 24,2019	Dec 24,2019	Dec 21,2019	Dec 16,2109	Dec 14,2019
Date of admission	Dec 26,2019	Dec 22,2019	Dec 28,2019	Dec 28,2019	Dec 28,2019	Dec 27,2019	Dec 14,2019
Fever	+	+	+	+	+	+	+
Body Temperature (°C)	38.4	37.3	39	37.9	38.7	37.2	38
Cough	+	+	+	+	+	+	+
Sputum Production	+	+	-		-	-	+
Dizzy	+		+	+	-	+	
Weakness	+		+		-	-	
Chest tightness	+			+	+	-	
Dyspnea	+			+	+	+	-
Bacterial culture			streptococcus pneumoniae	streptococcus pneumoniae	-		streptococcus pneumoniae
Glucocorticoid therapy	No	No	Yes	Yes	Yes	Yes	No
Antibiotic therapy	Cefoselis	Ceftazidime, Levofloxacin	Cefminox	Cefminox, moxifloxacin	Cefminox	No	No
Antiviral therapy	Oseltamivir	No	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	No
Oxygen therapy	mechanical ventilation	No	No	Mask	No	No	No

The early 43M Wuhan central hospital patient in this table was mentioned by Ai Fen [1] [2] Table comes from pre-print: https://www.biorxiv.org/content/10.1101/2020.01.24.919183v2.full.pdf

6 of these patients are in thepaper's overlay

```
only
                                                 one
                                                                                       missing
                                                                                                                                                   41M
                                                                                                                                                                                                Wuhan-Hu-1
                                                                                                                                                                                                                                                                                    is
                                                                                                                                                                                                                                                                                                                 evidently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1-8
                                                                                                                                                                                                9 Jiang'an District male sells prepared chickens
                  江岸区
                                                     男42
                                                                                 售卖白条鸡
                                                                                                                                                                                            9 Jiang'an District male sells prepared chickens
10 Jiang'an District Female 78 Gives food to her son
11 Jiang'an District Female 44 Selling Jiwei Shrimp
12 Jiang'an District Male 31? Selling Jiwei Shrimp
12 Jiang'an District Male 31? Selling turtle
13 Jiang'an District Male 51 Selling turtle
14 Jianghan District Male 51 Selling turtle
15 Jianghan District Male 51 Self-employed: selling dried and fresh seasonings
16 Jianghan District Hale 43 years old Worker: Distribution of aquatic products
17 Gonghan District Female 57 years old Self-employed: selling shrimp
18 Yankou male 65 years old operator, frozen dumplings
19 Yankou Male 67 years old Operator, white striped poultry, chicken feet, pig brain
20 Qiaokou Male 69 years old Purchasing wholesaler, seafood, abalone, lobster
21 Qiaokou Male 69 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar
22 Qiaokou Female 48-year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar
24 Qiaokou male 78 years old retired
                                                                              售卖几条鸡饭
等实早鱼
等卖早鱼
等卖车鱼鱼
等卖车户:售卖工车鲜调料
工人:户:部送卖虾类
个体产:售卖虾类
                  为女女男男51
女女男男51
女女男男51
 10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
                                                                               个体户:售卖虾卖
经营者,冷冻水饺
经营者,占条点、鸡爪、猪脑
采购批发者,海鲜鲍鱼 龙虾
采购经营者,各美调料
经营者,卖 干调,油盐 酱醋
经营者,卖 干调,油盐 酱醋
退休
                                                  女57多
男65岁
男47岁
男50y
男49岁
                  |研研硚硚硚硚桥
                                                    女48岁
男 78岁
```

The Wuhan&Hubei CDC 30 Dec <u>document</u> mentions 7 patients from Central hospital, Houhu district (that day the Nanjing road patients were already transferred to Tongji or Jinyintan or ?), This Central hospital story also mentions 7 patients in Houhu district.

65M and 41M Chen (accountant) aren't in the table but they were in Central hospital, Nanjing road, so it is likely that the table is only about Houhu district patients (and comprises all of them as of Dec 30).

The sample is published in the lancet as WH02 "Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding" <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159086/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159086/</a>

# Discussion of this case:

Being the earliest patient, his stall could appear in

A map showing which stall sells what and 8 early cases, including 65M, 49M, A20, Wei, and 4 unmatched dots.

So it would be 6th street 22,24. Selling aquatic products. The owner is named Wang Guorong so it could also be 44M1's stall.

# DRASTIC021

 Age&Sex
 44F

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 Exposure

 Onset
 2019-12-22

 1st Admission
 2019-12-22

Death Hospital Dec 31st Lineage Cluster 1st 27 JYT 11
2nd 41 JYT 11
CN-WHO ICU JYT WIV IPBCAMS-WHHBCDC-HBWH -

Discharged

```
IME-WH
IVDC
WH190
WHU
Other
Genbank
GISAID
GW
NMDC
CNGB
BioProject
SRP/CRA
SRR/CRR
SAM
Notes
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
2019-12-14
2019-12-15
2019-12-16
2019-12-17
2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
                  Central
2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
2019-12-28
2019-12-29
                  Central
```

```
2019-12-30
2019-12-31
2020-01-01
2020-01-02
2020-01-03
2020-01-04
2020-01-05
2020-01-06
2020-01-07
2020-01-08
2020-01-09
2020-01-10
2020-01-11
2020-01-12
2020-01-13
2020-01-14
2020-01-15
2020-01-16
2020-01-17
2020-01-18
2020-01-19
2020-01-20
2020-01-21
2020-01-22
2020-01-23
2020-01-24
2020-01-25
2020-01-26
2020-01-27
2020-01-28
2020-01-29
2020-01-30
2020-01-31
check
```

Linked cases:

References for the above summary:

 $\underline{\text{https://mega.nz/file/iuhlnSjC\#ky6DfxtsHi-z}\ uzQubdMd6yhX8yn6xPeugpzqb8ldpA}$ 

#	District	Sex/Age	Business at the Market
11	江岸区	女44	售卖基围虾
	Jiang'an	Female	Selling Jiwei Shrimp

# $\underline{https://www.biorxiv.org/content/10.1101/2020.01.24.919183v2.full.pdf}$

From the Wuhan-Hu-1 preprint, she was hospitalized at Central hospital (Houhu district)

Characteristic	Patient 2
Age (Year)	44
Sex	F
Date of illness onset	Dec 22,2019
Date of admission	Dec 22,2019
Fever	+
Body Temperature (°C)	37.3
Cough	+
Sputum Production	+
Dizzy	-
Weakness	-
Chest tightness	-
Dyspnea	-
Bacterial culture	
Gluco corticoid therapy	No
Antibiotic therapy	Ceftazidime,
Antibiotic therapy	Levo flox acin
Antiviral therapy	No
Oxygen therapy	No

Additional information about this case:

Discussion of this case:

# DRASTIC022 Wang

Age&Sex 44M1 Chinese name 王伟

Name Wang Wei (Wei may be a pseudonym)

Type Positive

Wet market Purchaser – CN-WHO report
Onset 2019-12-17 – CN-WHO report

1st Admission Discharged Death Hospital Dec 31st Lineage B
Cluster

Cluster

1st 27 JYT 
2nd 41 JYT 
CN-WHO S03

ICU JYT 
WIV 
IPBCAMS-WH
HBCDC-HB
WH WH01

IME-WH 
IVDC 
WH190 
WHU -

Genbank LR757998 GISAID EPI\_ISL\_406798

GW

Other

NMDC NMDC60013002-01 CNGB CNA0007332

BioProject CNP0000881, PRJEB36487, PRJCA008874

SRP/CRA CRA006587

 Commented [3]: where was this from?

Commented [4]: where was this recorded

```
CNS0191792, SAMEA6507890, SAMC703646
Notes
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
2019-12-14
2019-12-15
2019-12-16
2019-12-17
2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
                   Sixth hospital
2019-12-24
                   Tongji
2019-12-25
                   Tongji
2019-12-26
                   Tongji
2019-12-27
                   Tongji
2019-12-28
                   Tongji
2019-12-29
                   Tongji
2019-12-30
                   Tongji
2019-12-31
                   Jinyintan
2020-01-01
2020-01-02
2020-01-03
2020-01-04
2020-01-05
2020-01-06
2020-01-07
2020-01-08
2020-01-09
2020-01-10
2020-01-11
```

SAM

2020-01-12 2020-01-13 2020-01-14 2020-01-15 2020-01-16 2020-01-17 2020-01-18 2020-01-19 2020-01-20 2020-01-21 2020-01-22 Jinyintan 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check

Linked cases:

References for the above summary:

Gisaid says that EPI\_ISL\_406798 was collected on Dec 26 in PLA but it appears it was collected in Tongji instead, possibly on Dec 27.

# CN-WHO report

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage	
--------------	-------------	-------------------------------------	-------	---------------	--------------------	--	---------	--

S03	EPI_ISL_40 6798	Purchaser	17 Dec	26 Dec	6968 (ORF1a), 11764	L/B
					(ORF1a)	

https://www.ncbi.nlm.nih.gov/biosample/?term=SAMEA6507890

https://www.ulabmed.com/content-270-11941-1.html

Archived: https://web.archive.org/web/20210822161620/https://www.ulabmed.com/content-270-11941-1.html

44 M wang in here is a possibility Though the details of his work would clash with the CN-WHO report

### Additional information about this case:

#### According to Caixin report

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html this case sampled on Dec 26 was sequenced and reported by BGI on Dec 29 making it the second independent discovery of the new virus. https://archive.ph/atwRN

 $\frac{https://web.archive.org/web/20210806015201/http://www.cb.com.cn/index/show/zj/cv/cv13474081268/p/s.html}{}$ 

Wang Wei began to have fever symptoms on December 16 or 17, 2019 After "surviving for 8 days" at home, he was admitted to the Wuhan Sixth Hospital because of a persistent high fever of about 40 degrees Celsius.

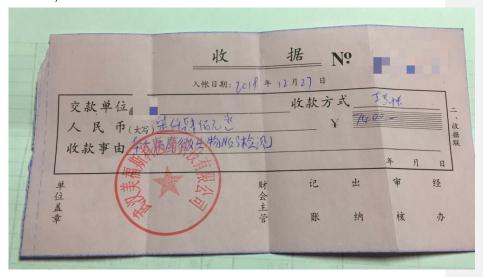
Wang Wei, 44 years old this year, works part-time at a stall in the Huanan Seafood Wholesale Market in Wuhan that sells frozen seafood such as octopus, yellow croaker and squid.

On December 24, 2019, Wang Wei was transferred to Tongji Hospital. "I was admitted to the hospital on December 24th. The doctor took a CT scan on the same day and found that nearly 1/3 of the area of white shadow appeared in my brother's lungs. By December 27th, the area of white shadow spread to 2/3, and immediately asked us to transfer to another hospital. "Wang Yan said. At the same time, Wang Wei conducted an

out-of-hospital inspection called "NGS detection of pathogenic microorganisms".

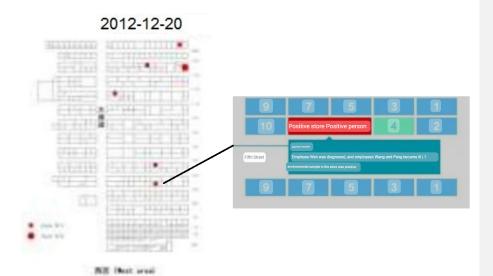
### This Dec 27 bill mentions NGS:

The second handwritten line seems to be 华大基因微生物NGS检测 (BGI Microbial NGS Detection)



From the USA lobster September 2021 story, his stall could be 5th street 6,8 where there is an employee named Wang, and which appears in the Dec 20 onset map in the WHO report annexes.

https://moment.rednet.cn/pc/content/2021/09/17/10172606.html



From A map showing which stall sells what and 8 early cases, including 65M, 49M, A20, Wei, and 4 unmatched dots.

#### Another possible stall is

6th street 22,24. Sells aquatic products, it is in the Koopmans early cases maps the owner is named Wang Guorong, though 44M1 is said to be a part-time worker.

Though the frozen seafood description of 44M1's stall matches better with the other aquatic product stall street 10 on the same map

https://aiqicha.baidu.com/company\_detail\_15824189595228

Seems a likely match for Sister Wang's brother - in which case more info on dates and a surname <a href="https://www.ulabmed.com/content-270-11941-1.html">https://www.ulabmed.com/content-270-11941-1.html</a> and <a href="https://baijiahao.baidu.com/s?id=1654845412197587426&wfr=spider&for=pc">https://baijiahao.baidu.com/s?id=1654845412197587426&wfr=spider&for=pc</a>

Archived: https://web.archive.org/web/20210822161620/https://www.ulabmed.com/content-270-11941-1.html

### Original:

一、王姓患者姐姐(以下简称"王姐"):弟弟在经营冻品的档口打工 每月工资5000元

据了解,王姐一家是东北人,在武汉落地扎根了20余年。弟弟在武汉华南海鲜批发市场一家经营 鸡鸭鱼等冻品的档口打工,每天凌晨3点钟上班,从武汉市白沙洲农副产品大市场处进货,再运 到华南海鲜批发市场进行售卖,傍晚5点半下班。

"弟弟在海鲜市场打工,一个月工资5000元,每天工作超过12个小时。"王姐告诉《中国经营报》记者,她弟弟的工作主要是每天要搬运冻品,双手已经变得有些僵硬麻木了。"弟弟工作的环境也不容乐观,市场常年脏乱差,我每次去都要捂着鼻子,可即便这样,市场的客流量依旧可观,因为价格便宜。"

王姐说,其弟弟于2019年12月31日下午两点从华中科技大学同济医学院附属同济医院转入金银潭医院,入住该院住院部南楼四楼。每当有患者从其他医院转到金银潭医院,医务人员都会询问"是不是华南海鲜市场的商户"或有没有去过市场、吃过市场的海鲜。

据王姐介绍,她弟弟大概在2019年12月16日或17日开始出现发烧症状,在家里"挺了8天"之后,因持续高烧约40摄氏度才住进了武汉市第六医院。"2019年12月24日住到医院里,当天医生通过 CT拍片,发现弟弟的肺部出现近1/3面积的白色阴影,到了12月27日白色阴影面积扩散至2/3,随即要求我们转院。"王姐告诉记者。

王姐表示,现在她弟弟在金银潭医院一天共要打7瓶点滴,包括白蛋白等药品。2020年1月3日,除了给弟弟和隔壁床病人捎带物品之外,王姐又向金银潭医院预交了1万元住院费,而在此前三天,已在金银潭医院共计花去4000元。截至目前,加上之前的治疗开销,王姐一家共花费约4.3万元。

"弟弟今年44岁,一直在武汉租房子住。"王姐告诉记者,"现在弟弟已经没有钱治病了,是我们两个姐姐在帮忙凑钱。"据其了解,在金银潭医院住院的病人大多是出苦力打工的,很多人东拼西凑,到处借钱治病。

#### Translation

1. The sister of the **patient surnamed Wang** (hereinafter referred to as "Sister Wang"): **the younger brother works in a frozen food stall** with a monthly salary of 5,000 yuan

It is understood that Sister Wang's family is from the Northeast and has been in Wuhan for more than 20 years. My younger brother works at a stall in Wuhan Huanan Seafood Wholesale Market that sells chicken, duck, fish and other frozen products. He goes to work every day at 3 o'clock in the morning. He buys goods from Wuhan Baishazhou Agricultural and Sideline Products Market, and then transports them to Huanan Seafood Wholesale Market for sale. In the evening Get off work at half past five.

"My younger brother works in a seafood market. He earns 5,000 yuan a month and works more than 12 hours a day." Sister Wang told a reporter from China Business News that her younger brother's job is mainly to carry frozen products every day, and his hands have become a bit stiff and numb. Up. "My brother's working environment is not optimistic. The market is dirty and messy all the year round. I have to cover my nose every time I go, but even so, the passenger flow in the market is still considerable because the price is cheap."

Sister Wang said that his brother was in 2019. At 2:00 pm on December 31, he was transferred from Tongji Hospital Affiliated to Tongji Medical College of Huazhong University of Science and Technology to Jinyintan Hospital and was admitted to the fourth floor of the South Building of the Inpatient Department of the hospital. Whenever a patient is transferred from another hospital to Jinyintan Hospital, the medical staff will ask "Is it a merchant in the South China Seafood Market" or whether he has been to the market or eaten seafood from the market.

According to Sister Wang, her younger brother started to have fever on December 16 or 17, 2019. After "standing for 8 days" at home, he was admitted to Wuhan Sixth Hospital because of a high fever of about 40 degrees Celsius. "I was admitted to the hospital on December 24, 2019. The doctor used CT to take pictures and found that his brother's lungs had a white shadow of nearly one-third of the area. By December 27, the white shadow area spread to two-thirds, and he immediately asked us to Transferred." Sister Wang told reporters.

Sister Wang said that her brother now takes 7 vials of intravenous drips a day at Jinyintan Hospital, including drugs such as albumin. On January 3, 2020, in addition to piggybacking items for her younger brother and the patient next to the bed, Sister Wang also prepaid 10,000 yuan for the hospitalization fee to Jinyintan Hospital. In the previous three days, she had spent a total of 4,000 yuan in Jinyintan Hospital. Up to now, plus the previous treatment expenses, the Wang family has spent a total of about 43,000 yuan.

"My brother is 44 years old this year and has been renting a house in Wuhan." Sister Wang told reporters. "Now my brother has no money to treat the illness. Our two sisters are helping to make up the money." According to her understanding, most of the patients in Jinyintan Hospital are hospitalized. They work hard, and many people work together and borrow money to treat illnesses everywhere.

# Discussion of this case:

Discuss clashes with CN-WHO report and the fact these may in fact be 2 distinct cases - wang very common name  $\,$ 

# DRASTIC023

 Age&Sex
 44M2

 Chinese name
 XXX

 Name
 XX X

 Type
 Suspected

Wet market Transportation staff
Onset 2019-12-12
1st Admission 2019-12-25
Discharged 2020-01-01

Death Y

Hospital Dec 31st Union Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank

Commented [5]: Probably not a death case. Can't be death and discharged. 1st death was later in Jan.

Commented [6]: Confirmed death case, but his case is "suspected", based on CT image scan.

GISAID	_
GW	_
NMDC	_
CNGB	
	-
BioProject	-
SRP/CRA	-
SRR/CRR	-
SAM	-
Notes	
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
2019-12-05	-
2019-12-06	-
2019-12-07	-
2019-12-08	_
2019-12-09	_
2019-12-10	_
2019-12-11	_
2019-12-12	_
2019-12-13	_
2019-12-13	-
	-
2019-12-15	-
2019-12-16	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	Union
2019-12-26	Union
2019-12-27	Union
2019-12-28	Union
2019-12-29	Union
2019-12-30	Union
2019-12-31	Union
	Union
2020-01-01	UTITOTI
2020-01-02	-
2020-01-03	-
2020-01-04	-

2020-01-05 2020-01-06 2020-01-07 2020-01-08 2020-01-09 2020-01-10 2020-01-11 2020-01-12 2020-01-13 2020-01-14 2020-01-15 2020-01-16 2020-01-17 2020-01-18 2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check

Linked cases:

References for the above summary:

Severe Acute Respiratory Disease in a Huanan Seafood Market Worker: Images of an Early Casualty

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7233436/

A 44-year-old man who was a transportation staff member in the Huanan seafood market in Wuhan, China, presented with a 13-day history of high fever and cough on December 25, 2019.

...

Unfortunately, he died 1 week later after failure of supportive measures

### Additional information about this case:

His date of death is calculated from 7 days after the CT scan images were taken on Dec 25, 2019.

Discussion of this case:

See also 67M a second suspected death from Union hospital and with similar dates.

# DRASTIC024

 Age&Sex
 45U

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 Vendor

 Onset
 2019-12-26

 1st Admission
 2019-12-30

Discharged Death Hospital Dec 31st Lineage -

Cluster CN-WHO 4.2

1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-

HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26 2019-12-27

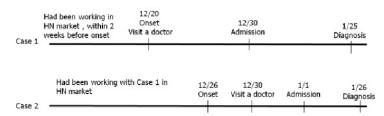
2019-12-28	-
2019-12-29	-
2019-12-30	Visit a doctor
2019-12-31	-
2020-01-01	Admission
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

DRASTIC039 56M

References for the above summary:

Cluster 4: There were two confirmed cases, both of whom were employees of the same stall in Huanan Market, and both of them denied contact history of poultry and animals, as well as contact history of travel. Employee one, 56 years old, fell ill on 20 December 2019; employee two, 45 years old, fell ill on 26 December 2019. It was a fixed stall in the Huanan Market, dealing in aquatic products such as catfish and perch.



Possible source of infection: Employee one might be infected from environmental exposure in Huanan Market, and employee two might be infected from environmental exposure in Huanan Market or human-to-human transmission.

Additional information about this case:

Discussion of this case:

# DRASTIC025

Age&Sex 47M
Chinese name XXX
Name XX X
Type Positive
Wet market Exposure
Onset -

Onset 1st Admission Discharged Death Hospital Dec 31st Lineage Cluster 1st 27 JYT 19 2nd 41 JYT 19 CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01

2019-12-02 2019-12-03 2019-12-04 2019-12-05

2019-12-06	-
2019-12-07	-
2019-12-08	-
2019-12-09	-
2019-12-10	-
2019-12-11	-
2019-12-12	-
2019-12-13	_
2019-12-14	_
2019-12-15	_
2019-12-16	_
2019-12-17	_
2019-12-18	_
2019-12-19	_
2019-12-20	_
2019-12-21	_
2019-12-22	_
2019-12-23	_
2019-12-24	_
2019-12-25	_
2019-12-26	-
2019-12-27	_
2019-12-28	-
	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-

2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

Linked cases:

# References for the above summary:

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
19	研口 Qiaokou	男47 Male	经营者,白条禽、鸡爪、猪脑 Operator, white striped poultry, chicken feet, pig brain

Additional information about this case:

# Discussion of this case:

# DRASTIC026

Age&Sex 48F1
Chinese name 殷XX
Name XX Yin
Type Positive
Wet market -

Onset 2019-12-10 1st Admission 2019-12-24 Discharged 2020-01-20

Death Y

Hospital Dec 31st Jinyintan

 Lineage

 Cluster

 1st 27 JYT

 2nd 41 JYT

 CN-WHO

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

 WH

 IME-WH

 IVDC

 WH190

 WHU

Other	-
Genbank	-
GISAID	-
GW	-
NMDC	-
CNGB	-
BioProject	-
SRP/CRA	-
SRR/CRR	-
SAM	-
Notes	
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
2019-12-05	-
2019-12-06	-
2019-12-07	-
2019-12-08	-
2019-12-09	-
2019-12-10	Primary hospital
2019-12-11	Primary hospital
2019-12-12	Primary hospital
2019-12-13	Primary hospital
2019-12-14	Primary hospital
2019-12-15	Primary hospital
2019-12-16	Primary hospital
2019-12-17	Primary hospital
2019-12-18	Primary hospital
2019-12-19	Primary hospital
2019-12-20	Primary hospital
2019-12-21	Primary hospital
2019-12-22	Primary hospital
2019-12-23	Primary hospital
2019-12-24	Tongji
2019-12-25	Tongji
2019-12-25	Tongji
2019-12-20	Tongji
2019-12-27	Tongji
2019-12-20	Tongji
2019-12-29	Tongji
2019-12-30	Jinyintan
2019-12-31	•
2020-01-01	Jinyintan
2020-0 I-UZ	Jinyintan

2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	Jinyintan
2020-01-12	Jinyintan
2020-01-13	Jinyintan
2020-01-14	Jinyintan
2020-01-15	Jinyintan
2020-01-16	Jinyintan
2020-01-17	Jinyintan
2020-01-18	Jinyintan
2020-01-19	Jinyintan
2020-01-20	Jinyintan
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

References for the above summary:

### NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

七、殷XX,女,48岁,既往有糖尿病,脑梗死。2019年12月10日无诱因出现发热(38°C)、周身酸痛、乏力,逐渐出现咳嗽,少痰,在基层医院抗感染治疗2周未见好转。12 月27日出现胸闷、气短,活动后明显,同济医院予无创通气、常规抗感染治疗,病情仍有加重。12月31日转入金银潭医院,给予鼻导管高流量吸氧等对症治疗措施,低氧状态仍未见明显好转,病情仍有恶化趋势。2020年1月14日胸部CT可见双肺弥漫机化性改变,部分伴牵拉性支气管扩张,其&以双下肺尤为明显。1月20日11时50分行气管插管,并予镇痛、镇静治疗,指端氧饱和度及血压持续下降,继而心率下降,最终抢救无效死亡。

#### Translation:

7. Yin XX, female, 48 years old, has previous diabetes and cerebral infarction. On December 10, 2019, she developed fever (38°C), body aches, fatigue, and gradually developed cough and decreased sputum. She did not get better after 2 weeks of anti-infection treatment in the primary hospital. On December 27, chest tightness and shortness of breath occurred, which were obvious after the activity. Tongji Hospital was given non-invasive ventilation and conventional anti-infection treatment, and the condition was still getting worse. He was transferred to Jinyintan Hospital on December 31, and was given symptomatic treatments such as high-flow oxygen inhalation with a nasal catheter. The hypoxic state has not improved significantly, and the condition is still getting worse. On January 14, 2020, chest CT showed diffuse and organizing changes in both lungs, some of which were accompanied by traction bronchiectasis, especially the lower lungs. Tracheal intubation was performed at 11:50 on January 20, and analgesia and sedation were given. The oxygen saturation and blood pressure at the fingertips continued to drop, followed by a drop in heart rate, and the rescue failed.

Patient List Video

Additional information about this case:

Discussion of this case:

# DRASTIC027 Qi Yanxia

Age&Sex 48F2
Chinese name 祁燕霞
Name Qi Yanxia
Type Positive
Wet market Exposure
Onset 2019-12-15

1st Admission Discharged Death -

Hospital Dec 31st Jinyintan

Lineage -

Cluster Li 3.2, NHC27

 1st 27 JYT
 23

 2nd 41 JYT
 23

 CN-WHO

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

 WH

 IME-WH

 IVDC

 WH190

 WHU

 Other

 Genbank

GISAID GW NMDC CNGB BioProject SRP/CRA SRR/CRR SAM -

Notes Wife of 49M

2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26 2019-12-27 2019-12-28 2019-12-29 2019-12-30 2019-12-31 Jinyintan 2020-01-01 2020-01-02

2020-01-03 2020-01-04

```
2020-01-05
2020-01-06
2020-01-07
2020-01-08
2020-01-09
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2020-01-11
2020-01-12
2020-01-13
2020-01-14
2020-01-15
2020-01-16
2020-01-17
2020-01-18
2020-01-19
2020-01-20
2020-01-21
2020-01-22
2020-01-23
2020-01-24
2020-01-25
2020-01-26
2020-01-27
2020-01-28
2020-01-29
2020-01-30
2020-01-31
check
```

## Linked cases:

Connected to <a href="DRASTIC040">DRASTIC040</a> Wei Guixian shrimp seller by the Huanan market

Connected to <u>DRASTIC029</u> <u>DRASTIC055</u> <u>DRASTIC030</u> by the Huanan Market Family Cluster Connected to <u>DRASTIC052</u> 69M1 via (hotel name) Hotel

# References for the above summary:

30 December 2019 report by the "joint investigation team of the Hubei Provincial, Municipal, and District Centers for Disease Control and Prevention" <a href="http://zhishifenzi.blog.caixin.com/archives/221847">http://zhishifenzi.blog.caixin.com/archives/221847</a> where the names are hidden but found unobfuscated there <a href="https://archive.ph/hvuNv">https://archive.ph/hvuNv</a>

(夫妻:兰小标、祁燕霞,兰小标哥哥兰兵标,兰小标岳父祁喜山),患者二陈三红及其母亲(邱风兰)

## Patient List Video

## https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
23	研口 Qiaokou	女48 Female	经营者,卖 干调,油盐 酱醋 Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

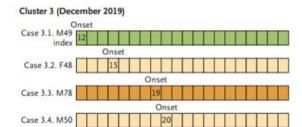
## Video Thumbnail

### https://archive.vn/f1A7b



Cluster 3 M50 of Li et al. 2020

https://www.nejm.org/doi/full/10.1056/nejmoa2001316



## Additional information about this case:

```
    兰小
    22
    新口
    男49岁
    經營者,实 干调,油盐 舊額
    22 Qiaokou Male 49 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar 23 Qiaokou Female 48-year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 24 Qiaokou male 78 years old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 24 Qiaokou male 18 years old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 24 Qiaokou male 18 years old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 24 Qiaokou male 18 years old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 24 Qiaokou male 18 years old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oil, salt, sauce and vinegar 25 Qiaokou fall operator, selling dry goods and condiments, oi
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### Discussion of this case:

Infected via her husband himself possibly infected via mahjong

https://web.archive.org/web/20200225034041/https://m.yicai.com/news/100476470.html

The reporter learned from an employee of a dry condiment shop in the South China Seafood Wholesale Market that the owner, wife of the owner, brother of the owner, and father-in-law of the shop were hospitalized with pneumonia, and the four lived together.

"Our boss fell ill on December 19 (2019). Before he became ill, he played mahjong with a card friend who sold frozen chickens and ducks. This mahjong friend was also admitted to the hospital for pneumonia." The above-mentioned employee said, the boss first The lady who got sick later became sick too.

"The proprietress' symptoms were mild"

-CBN (Yicai) https://archive.md/dHV6q

# DRASTIC028

49F Age&Sex X书勤 Chinese name Name Shuqin X Type Positive Wet market Vendor 2019-12-23 Onset 1st Admission 2019-12-27 2020-01-16 Discharged

Death Ν Hospital Dec 31st Jinyintan В Lineage Cluster 1st 27 JYT 15 2nd 41 JYT 15 **CN-WHO** S10 ICU JYT ICU-06 WIV04 WIV

IPBCAMS-WH-02

HBCDC-HB-01/2019, HBCDC-HB-03/2019

WH -

IME-WH -

IVDC IVDC-HB-01 WH190 WH19001

WHU -Other -

Genbank MN996528, MT019530

GISAID EPI\_ISL\_402119, EPI\_ISL\_402124, EPI\_ISL\_402132, EPI\_ISL\_403931,

EPI\_ISL\_412899

GW GWHABKG00000000, GWHABKL00000000 NMDC NMDC60013002-08, NMDC60013084-01

CNGB -

BioProject PRJCA002163, PRJCA002165, PRJCA002202, PRJNA605907,

PRJNA605983, PRJNA616446

SRP/CRA CRA002334, CRA002423, CRA002475, SRP248092, SRP249613,

SRP254688

SRR/CRR CRR116148, CRR122277, CRR122282, CRR122283, CRR125941, CRR125949, SRR11059947, SRR11092057, SRR11092062, SRR11454613, SRR11454614 SAM SAMC133237, SAMC133242, SAMC134549, SAMN14081557,

SAMN14082197, SAMN14479128, SAMN14479129

Notes	
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
2019-12-05	-
2019-12-06	-
2019-12-07	-
2019-12-08	-
2019-12-09	-
2019-12-10	-
2019-12-11	-
2019-12-12	-
2019-12-13	-
2019-12-14	-
2019-12-15	-
2019-12-16	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	Integrated
2019-12-28	Integrated
2019-12-29	Jinyintan
2019-12-30	Jinyintan
2019-12-31	Jinyintan
2020-01-01	Jinyintan
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	Jinyintan
2020-01-12	Jinyintan

2020-01-13	Jinyintan
2020-01-14	Jinyintan
2020-01-15	Jinyintan
2020-01-16	Jinyintan
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

## References for the above summary:

## CN-WHO Report

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
S10	GWHABKG 00000001	Vendor	Vegetab le	23 Dec	30 Dec	0 d	L/B

		2019/12/30	BetaCoV/Wuhan/HB CDC-HB-03/2019	//	//	Illumina MiSeq	3156	0.01
S10	2019/12/23	2019/12/30	BetaCoV/Wuhan/IP BCAMS-WH- 02/2019	//	//	Illumina NextSeq 500	7885	0.01
		2019/12/30	BetaCoV/Wuhan/W H19001/2019	//	//	NGS	45	0.02
		2019/12/30	WIV04	//	//	Illumina MiSeq, Illumina HiSeq 1000	108	0.01
		2019/12/30	BetaCoV/Wuhan/IV DC-HB-01/2019	//	NA	missing		

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
15	江岸区 Jiang'an	女49 Female	个体户:售 卖干鲜调料 Self-employed: selling dry and fresh seasonings

Additional information about this case:

Connected to 51M from thepaper's overlay: she is #15 he is #14 and they have the same description "Self-employed: selling dry and fresh seasonings".

Discussion of this case:

Positive seasoning stalls are mentioned in https://archive.ph/wgtCY

See Central's 51M case DRASTIC312 for a possible match for the stall of this seasonings 49F 51M couple.

#### Mess, mismatch

Babar: I moved WH19005 and IVDC-HB-05 to 32M2 DRASTIC008 bis

https://ngdc.cncb.ac.cn/biosample/browse/SAMC703641
says that WH19001 (49F) and WH19005 are the same biosample.
WH19005 is identical to IVDC-HB-05

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013086-01

who is said to be a 32M admitted on Dec27 and shouldn't quite be in 49F

IVDC-HB-05 is said to be 32M in the IVDC paper, IVDC-HB-01 is said to be 49F.

For WH19005 in 49F it is based on the Dec23 onset and Dec29 admission date in <a href="https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013002-10">https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013002-10</a>
But the sequence doesn't quite match.

It is identical to IVDC-HB-05

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013086-01

who is said to be a 32M admitted on Dec27 and shouldn't quite be in 49F

These are different to IVDC-HB-GX02 32M and WIV02 32M

## DRASTIC029 Lan Xiao Biao

Age&Sex 49M Chinese name 兰小标

Name Xiao Lan biao
Type Positive
Wet market Vendor
Onset 2019-12-12

1st Admission Discharged Death -

Hospital Dec 31st Jinyintan

Lineage

Cluster Li 3.1, NHC27

1st 27 JYT 22
2nd 41 JYT 22
CN-WHO ICU JYT WIV IPBCAMS-WHHBCDC-HBWH IME-WH IVDC WH190 WHU Other -

Genbank

```
GISAID
GW
NMDC
CNGB
BioProject
SRP/CRA
SRR/CRR
SAM
                    Husband of 48F (daughter of 78M) and brother of 50M. First onset in the
Notes
cluster. Owner of the stall West 7th street 5,7 which is mentioned as positive on the WHO map
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
2019-12-14
2019-12-15
2019-12-16
2019-12-17
2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
2019-12-28
2019-12-29
2019-12-30
2019-12-31
                    Jinyintan
2020-01-01
                    Jinyintan
2020-01-02
                    Jinyintan
2020-01-03
                    Jinyintan
```

2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

### Linked cases:

Connected to Shrimp vendor Wei Guixian  $\underline{\mathsf{DRASTIC040}}$  by the market and potentially Mahjong toilet

Connected to <u>DRASTIC027</u> <u>DRASTIC055</u> <u>DRASTIC030</u> by the Huanan Market Family Cluster Connected to <u>DRASTIC052</u> 69M1 via (hotel name) Hotel

A case with links to Mahjong

## References for the above summary:

30 December 2019 report by the "joint investigation team of the Hubei Provincial, Municipal, and District Centers for Disease Control and Prevention" <a href="http://zhishifenzi.blog.caixin.com/archives/221847">http://zhishifenzi.blog.caixin.com/archives/221847</a> where the names are hidden but found unobfuscated there <a href="https://archive.ph/hvuNv">https://archive.ph/hvuNv</a>

(夫妻:兰小标、祁燕霞,兰小标哥哥兰兵标,兰小标岳父祁喜山),患者二陈三红及其母亲(邱风兰)

- -CBN (Yicai) https://archive.md/dHV6q
- -WSJ https://archive.md/9a5jm

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
22	研口 Qiaokou	男49 Male	经营者,卖 干调,油盐 酱醋 Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

#### Video Thumbnail

https://archive.vn/f1A7b



#### Cluster 3 M50 of Li et al. 2020

https://www.nejm.org/doi/full/10.1056/nejmoa2001316





#### Additional information about this case:

```
    兰小
    22
    新口
    男49岁
    经营售,卖 干调,油盐 档額
    22 Qiaokou Male 49 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    第
    23
    新口
    女48岁
    经营售,卖 干调,油盐 档額
    23 Qiaokou Female 48-year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    23
    21
    新口
    男59
    果购经营售,各类课料
    24 Qiaokou male 78 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    23
    Qiaokou Male 78 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    24
    Qiaokou Male 78 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    24
    Qiaokou Male 78 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    25
    Qiaokou Male 78 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    26
    Qiaokou Male 78 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    27
    Qiaokou Male 79 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    28
    Qiaokou Male 79 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    29
    Qiaokou Male 79 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar

    21
    Qiaokou Male 79 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar
```

Wu Wenjuan, a doctor at Wuhan's Jinyintan Hospital, which specializes in infectious diseases and handled many of the early cases, confirmed in a phone interview that among the earliest cases were four people in the same family, including a 49-year-old Hua'nan market vendor and his father-in-law. The vendor got sick on Dec. 12, while the father-in-law, who had no exposure to the market, fell ill seven days later, according to a study by Chinese disease control researchers.

#### -WSJ https://archive.md/9a5jm

The reporter learned from an employee of a dry condiment shop in the South China Seafood Wholesale Market that the owner, wife of the owner, brother of the owner, and father-in-law of the shop were hospitalized with pneumonia, and the four lived together.

"Our boss fell ill on December 19 (2019). Before he became ill, he played mahjong with a card friend who sold frozen chickens and ducks. This mahjong friend was also admitted to the hospital for pneumonia." The above-mentioned employee said, the boss first The lady who got sick later became sick too.

"The proprietress' symptoms were mild"

-CBN (Yicai) https://archive.md/dHV6q

 $\rightarrow$  "The boss" is an unambiguous reference to 49M whose onset is Dec 12 so the 19 Dec date is a bit strange. Perhaps admission date?

To reiterate:

50M Brother 

E Dec 20 DRASTIC030

78M Father-in-law 祁 Dec 19 DRASTIC055

48F Wife 祁 Dec 15 DRASTIC027

His business:

Name

武汉市江汉区祁兴干鲜商行

Location in the market:

武汉市江汉区华南海鲜市场西区七街5、7号 (7th street stalls 5-7)

https://aiqicha.baidu.com/company\_detail\_15049682218930

archived:

https://web.archive.org/web/20211206204512/https://aiqicha.baidu.com/company\_detail\_15049682218930

Note also the 祁 in the business name is the same as the other family name in the 4 person cluster

Here <a href="https://www.tianyancha.com/human/1796919787-c3441679359">https://www.tianyancha.com/human/1796919787-c3441679359</a> lists a business partner 祁洋 (Qi Yang)

Sharing a business in Hubei with 兰小标

湖北(共1家)武汉荣景品食品有限公司

The wife is named 祁燕霞 (Qi Yanxia) in the Wuhan&Hubei CDC 30 Dec document

More information on this business of qi yang and lan xiao biao:

https://aiqicha.baidu.com/company detail 32158603269504

Archived: https://archive.vn/65FBU

Qi yang perhaps sounds more likely male than female

### Discussion of this case:

Reading carefully these accounts (and Li et al) makes clear that 49M was the origin of the family cluster and likely got it from Mahjong

Discuss more here

# DRASTIC030 Lan Bingbiao

Age&Sex 50M
Chinese name 兰兵标
Name XX Lan
Type Positive
Wet market Exposure
Onset 2019-12-20

1st Admission Discharged Death -

Hospital Dec 31st Jinyintan

Lineage

Cluster Li 3.4, NHC27

1st 27 JYT 21
2nd 41 JYT 21
CN-WHO ICU JYT WIV IPBCAMS-WHHBCDC-HBWH IME-WH IVDC WH190 WHU Other -

 Genbank

 GISAID

 GW

 NMDC

 CNGB

 BioProject

 SRP/CRA

 SRR/CRR

 SAM

Notes Brother of 49M

2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26 2019-12-27 2019-12-28 2019-12-29 2019-12-30 2019-12-31 Jinyintan 2020-01-01 Jinyintan

Jinyintan

Jinyintan

2020-01-02

2020-01-03

2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

### Linked cases:

Connected to shrimp vendor Wei Guixian  $\underline{\mathsf{DRASTIC040}}$  by the market

Connected to <u>DRASTIC029</u> <u>DRASTIC027</u> <u>DRASTIC055</u> by the Huanan Market Family Cluster Connected to <u>DRASTIC052</u> 69M1 via (hotel name) Hotel

## References for the above summary:

Video - what to call it

#### https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
21	研口	男50	采购经营者,各类调料
	Qiaokou	Male	Procurement operator, all kinds of spices

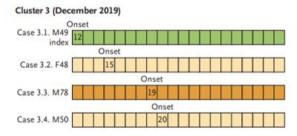
### Video Thumbnail Cluster

https://archive.vn/f1A7b



#### Cluster 3 M50 of Li et al. 2020

https://www.nejm.org/doi/full/10.1056/nejmoa2001316



#### Additional information about this case:

```
    兰小
    22
    初口
    男49岁
    经营者,卖 干调,抽盐 酱醋
    22 Qiaokou Male 49 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar 23 Qiaokou Female 48-year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 24 Qiaokou and 24 Qiaokou and 24 Qiaokou and 26 Qiaokou female 48-year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 24 Qiaokou and 26 Qiaokou dale 78 years old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 24 Qiaokou and 26 Qiaokou female 88-year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 26 Qiaokou female 89 year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 29 Qiaokou female 89 year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 29 Qiaokou female 89 year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 29 Qiaokou female 89 year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 29 Qiaokou female 89 year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 29 Qiaokou female 89 year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 29 Qiaokou female 89 Year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar 29 Qiaokou female 89 Qiaokou female 80 Qiaokou fe
```

#### Note From Francisco

Francisco

5:24 AM Sep 4

"Wu Wenjuan confirmed in a phone interview that among the earliest cases were four people in the same family" (WSJ)

Discussion of this case:

### 51M is a mess

the 51M turtle seller from the overlay has been matched to the Central 51M thanks to the First Level Response movie.

Thepaper's overlay contains all the 7 Central Houhu district patients from the <u>Wuhan-Hu-1</u> <u>preprint</u>. 7 patients also mentioned in the Wuhan & Hubei CDC report, by Li Wenliang, by Ai Fen, in the Central Houhu internal document...

In the overlay there are two 51M. https://justpaste.it/6abiv 49F and 51M are a couple selling seasonnings.

In <a href="https://archive.ph/wqtCY">https://archive.ph/wqtCY</a> there is the mention of a merchant 2nd street selling seasonings, admitted to Wuhan Central Hospital on December 25, and then transferred to Wuhan Union Hospital.

In Koopmans' updated map there is a stall 2nd street with 2 cases selling seasonings. https://aiqicha.baidu.com/company\_detail\_xITM-TogKuTw0Vu17UiWg\*DymWcCGcZPuQmd

### DRASTIC031

Age&Sex 51M1 Chinese name 戴红军

Name Dai Hong Jun
Type Positive
Wet market Vendor
Onset 2019-12-16
1st Admission 2019-12-27

Discharged Death Hospital Dec 31st Lineage Cluster 13 1st 27 JYT 2nd 41 JYT 13 CN-WHO **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC CNGB **BioProject** SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07

2019-12-08

```
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
2019-12-14
2019-12-15
2019-12-16
2019-12-17
2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
                   Central
2019-12-28
2019-12-29
2019-12-30
2019-12-31
2020-01-01
2020-01-02
2020-01-03
2020-01-04
2020-01-05
2020-01-06
2020-01-07
2020-01-08
2020-01-09
2020-01-10
2020-01-11
2020-01-12
2020-01-13
2020-01-14
2020-01-15
2020-01-16
2020-01-17
2020-01-18
2020-01-19
2020-01-20
2020-01-21
```

2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

### Linked cases:

Drastic007 31M selling turtles and is next to him in thepaper's overlay

## References for the above summary:

 $\underline{https://mega.nz/file/iuhlnSjC\#ky6DfxtsHi-z\ uzQubdMd6yhX8yn6xPeugpzqb8ldpA}$ 

#	District	Sex/Age	Business at the Market
13	江岸区	男51	售卖甲鱼
	Jiang'an	Male	Selling turtle

Wuhan-Hu-1 preprint

Characteristic	Patient 6
Age (Year)	51
Sex	M
Date of illness onset	Dec 16,2109
Date of admission	Dec 27,2019
Fever	+
Body Temperature (°C)	37.2
Cough	+
Sputum Production	-
Dizzy	+
Weakness	-
Chest tightness	-
Dyspnea	+
Bacterial culture	
Gluco corticoid therapy	Yes
Antibiotic therapy	No
Antiviral therapy	Oseltamivir, ganciclovir
Oxygen therapy	No

The "First Level reponse" movie around 9:30 <a href="http://cov2.free.fr/Covid-FirstLevelResponse/">http://cov2.free.fr/Covid-FirstLevelResponse/</a>

Dai Hong Jun says he went to Central hospital.

Li Li says his onset was on Dec 20.

The narrator says they work together and sell turtles.

Thepaper's overlay includes two 31M and 51M turtle sellers.

In the Wuhan-Hu-1 preprint on Central hospital patients there are a 31M (onset Dec 21) and a 51M (onset Dec 26).



### Additional information about this case:

### Discussion of this case:

51M could be Li Li (李力) appearing in the movie "First Level Response" who is said to sell turtles with his assistant Dai Hongjun (戴红军) who'd be 31M <a href="https://youtu.be/mCT2fp7QLIE?t=589">https://youtu.be/mCT2fp7QLIE?t=589</a>

There is a stall at this name on Xinhu road 11th street but it doesn't seem that they sell mainly turtles <a href="https://aiqicha.baidu.com/company">https://aiqicha.baidu.com/company</a> <a href="https://aiqicha.baidu.com/company">detail</a> <a href="https://aiqicha.baidu.com/company">16787560604479</a>

And there is no case at this stall which doesn't make sense if it is the one of 51M and 31M appearing in the paper's overlay.

## DRASTIC032

Age&Sex 51M2
Chinese name XXX
Name XX X
Type Positive
Wet market Exposure
Onset 1st Admission -

1st Admission Discharged Death Hospital Dec 31st Lineage Cluster 1st 27 JYT 14 2nd 41 JYT 14 CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01

2019-12-02 2019-12-03 2019-12-04 2019-12-05

2019-12-06	-
2019-12-07	-
2019-12-08	-
2019-12-09	-
2019-12-10	-
2019-12-11	-
2019-12-12	-
2019-12-13	_
2019-12-14	_
2019-12-15	_
2019-12-16	_
2019-12-17	_
2019-12-18	_
2019-12-19	_
2019-12-20	_
2019-12-21	_
2019-12-22	_
2019-12-23	_
2019-12-24	_
2019-12-25	_
2019-12-26	-
2019-12-27	_
2019-12-28	-
	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-

2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

#### Linked cases:

#### ???? are we talking of the same 51M?

Connected to <a href="DRASTIC052">DRASTIC052</a> 69M1 via (hotel name) Hotel
Connected to <a href="DRASTIC040">DRASTIC040</a> 57F Wei Guixian shrimp vendor by the NAME Clinic/ pharmacy

Connected to 49F from thepaper's overlay: she is #15 he is #14 and they have the same description "Self-employed: selling dry and fresh seasonings".

Positive seasoning stalls are mentioned in <a href="https://archive.ph/wgtCY">https://archive.ph/wgtCY</a>

See Central's 51M case DRASTIC312 for a possible match for the stall of this seasonings 49F 51M couple.

### References for the above summary:

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
14	江岸区	男51	个体户:售 卖干鲜调料

	Jiang'an	Male	Self-employed: seasonings	selling	dry	and	fresh
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Additional information about this case:

Discussion of this case:

## DRASTIC033

Age&Sex 51M3
Chinese name XXX
Name XX X
Type Positive
Wet market Exposure
Onset 2019-12-22

 1st Admission

 Discharged

 Death

 Hospital Dec 31st

 Lineage

 Cluster
 Li 4.2

 1st 27 JYT

 2nd 41 JYT

 CN-WHO

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26 2019-12-27 2019-12-28

WH

2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	- - -
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

## Linked cases:

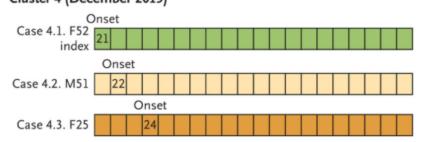
DRASTIC004 DRASTIC035

#### References for the above summary:

Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

## Cluster 4 (December 2019)



Discussion of this case:

## DRASTIC034

Age&Sex 51M4
Chinese name XXX
Name XX X

Type False positive

Wet market No

Onset 2019-12-07

1st Admission - Discharged -

Death Hospital Dec 31st Lineage Cluster -

Thelancet onset curve: the Dec 7 patient isn't marked related.

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext#section-3d6acba1-acea-4be2-8dc9-b7e14e5b6583

The WHO report gives precisions



Fig. 25. Spatial distribution of vendor cases associated with the Huanan market by week of onset.

Other initially suspected cases in December 2019

Three possible cases with disease onset on 1, 2 and 7 December 2019, respectively, were initially identified as potential cases in the retrospective case search and have been included in some published papers. Clinical review of these three cases by the Chinese expert team led to their exclusion as possible cases on the basis of the clinical features of their illness.

In the case with onset on 1 December, a 62-year-old man with past history of cerebrovascular disease was judged to have had a minor respiratory illness in early December, which responded to antibiotics. He developed a further illness with onset on 26 December 2019, which was later laboratory-confirmed to be COVID-19. This patient had no reported contact to the Huanan market, whereas his wife, who was admitted on 26 December with a COVID-19 compatible illness, reported close contact with the Huanan market. She was also later laboratory-confirmed to have COVID-19. This couple, together with their son, became part of the first recognized family cluster of COVID-19.

In the second case, a 34-year-old woman with onset on 2 December 2019 was assessed to have had venous thromboembolic disease and subsequently pneumonia. She remained negative on SARS-CoV-2 laboratory testing throughout a longer admission period ending in mid-February 2020.

In the third case, a 51-year-old man with onset on 7 December 2019 had symptoms of a cold and fever, and chest X-ray changes ("thickness of texture of both lungs and stripes"). His blood neutrophil count was raised and specific antibodies to *Mycoplasma pneumoniae* were detected. He responded well to antibiotics. Blood collected in April 2020 was reported negative for SARS-CoV-2-specific antibodies

### DRASTIC035

Wet market Vendor (though Lili Ren claims not linked to the market)

Onset 2019-12-22 (or 21th or 23th)

1st Admission2019-12-29Discharged2020-01-08DeathNHospital Dec 31stJinyintanLineageB

 Lineage
 B

 Cluster
 Li 4.1

 1st 27 JYT
 1

 2nd 41 JYT
 1

 CN-WHO
 S11

 ICU JYT
 ICU-08

 WIV
 WIV05

IPBCAMS-WH-04 (not sure) the WHO report says IPBCAMS-WH-03

(confusion with patient 3?) HBCDC-HB- -WH -

IME-WH IME-WH05

IVDC

WH190 WH19002

WHU -Other -

Genbank MN996529, MT019532, MT291830

GISAID EPI\_ISL\_402128, EPI\_ISL\_403929, EPI\_ISL\_529217

GW GWHABKI00000000, GWHABKM00000000, GWHABKM00000001

NMDC NMDC60013002-05

CNGB

BioProject PRJCA002163, PRJCA002165, PRJCA002202, PRJNA605907,

PRJNA605983

SRP/CRA CRA002334, CRA002423, CRA002475, SRP248092, SRP249613

SRR/CRR CRR116149, CRR122284, CRR125940, CRR125948, SRR11059946,

SRR11092061

SAM	SAMC133238,	SAMC133244,	SAMC134550,	SAMN14081558,
SAMN14082198	,	,	,	,
Notes				
2019-12-01	-			
2019-12-02	_			
2019-12-03	_			
2019-12-04	_			
2019-12-05	_			
2019-12-06	-			
2019-12-07	-			
2019-12-08	-			
2019-12-09	-			
2019-12-10	-			
2019-12-11	-			
2019-12-12	-			
2019-12-13	-			
2019-12-14	-			
2019-12-15	-			
2019-12-16	-			
2019-12-17	-			
2019-12-18	-			
2019-12-19	-			
2019-12-20	-			
2019-12-21	-			
2019-12-22	-			
2019-12-23	-			
2019-12-24	-			
2019-12-25	-			
2019-12-26	-			
2019-12-27	-			
2019-12-28	-			
2019-12-29	Integrated -> Jiny	rintan		
2019-12-30	Jinyintan			
2019-12-31	Jinyintan			
2020-01-01	Jinyintan			
2020-01-02	Jinyintan			
2020-01-03	Jinyintan			
2020-01-04	Jinyintan			
2020-01-05	Jinyintan			
2020-01-06	Jinyintan			
2020-01-07	Jinyintan			
2020-01-08	Jinyintan			
2020-01-09	-			
2020-01-10	-			

2020-01-11 2020-01-12 2020-01-13 2020-01-14 2020-01-15 2020-01-16 2020-01-17 2020-01-18 2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check

#### Linked cases:

DRASTIC004 DRASTIC033

### References for the above summary:

WH19002, 52F, onset Dec 22, low quality sequence, had visited the market <a href="https://ngdc.cncb.ac.cn/ncov/genome/accession?q=NMDC60013002-05">https://ngdc.cncb.ac.cn/ncov/genome/accession?q=NMDC60013002-05</a>

WH19002 high quality run, 52F, collected by IPBCAMS, but refers to article on WH19002 <a href="https://www.ncbi.nlm.nih.gov/biosample/SAMN14081558">https://www.ncbi.nlm.nih.gov/biosample/SAMN14081558</a>

WIV05, 52F, onset Dec 22, admitted 29, seller or deliverymen at the seafood market

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=GWHABKM00000001

https://www.nature.com/articles/s41586-020-2012-7/tables/1

https://www.nature.com/articles/s41586-020-2012-7/tables/2

The full xml of <a href="https://www.ncbi.nlm.nih.gov/sra/WIV05">https://www.ncbi.nlm.nih.gov/sra/WIV05</a> mentions collected by Jinyintan hospital.

#### Supplementary table 1 of the article on WH19002

https://academic.oup.com/cid/article/71/15/713/5780800

	ID	Gender	Age	Clinical lab	Days after onset	ICU	Outcome
WH19001	nCov1	female	49	Negative	8	N	Recovered
WH19002	nCov2	female	52	Negative	8	Y	Recovered
WH19003	nCov3	male	40	Negative	15	Y	Recovered
WH19004	nCov4	male	61	Negative	12	Y	Deceased
WH19010	nCov5	male	40	Negative	8	N	Recovered
WH19012	пCovб	male	56	Negative	10	Y	Recovered
WH19016	nCov7	female	53	Negative	7	N	Recovered
WH19053	nCov8	male	41	Negative	4	N	Recovered

Li et al (2020) onset Dec 21

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

In the Lili Ren paper on IPBCAMS sequences

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7147275/

52F, Onset Dec 22, admitted Dec 29

The 52F patient 3 is said to not be related to the market.

WHO report S11 onset Dec 23

See <u>IPBCAMS</u> mess, Virignie sent an email to BIGD who replaied that the raw reads of IPBCAMS' 52F were available as WH19002.

But in the WHO report p.74 (S11) the WIV 52F and the IPBCAMS 52F are matched together. All this is enough to claim that they are the same patient, vendor at the market.

Note that p.74 the IPBCAMS-WH-03,IPBCAMS-WH-04,IPBCAMS-WH-05 metadata are swapped. But still the five IPBCAMS sequences are in the table and only one (41M) is not linked to the market and there is only one 52F patient in this table..

She is also certainly among the <u>seven Zhang Jixian patients</u>, whence vendor at the market. Note that the three 52F sequences (WH19002 WIV05 IPBCAMS-WH-04) are different, we don't take it in account when matching the patients.

#### **CN-WHO Report**

S11	2019/12/23	2019/12/30	BetaCoV/Wuhan/IP BCAMS-WH- 03/2019	6996	//	Illumina	3371	0.01
		2019/12/30	WIV05	7016, 21137	//	MGISEQ 2000	13	0.01
		2019/12/30	SARS-CoV- 2/Wuhan_IME- WH05/human/2019/ CHN	//	//	Ion Torrent X5Plus	37	0.50

From China-WHO report, Chinese part, Table 7 page 72:

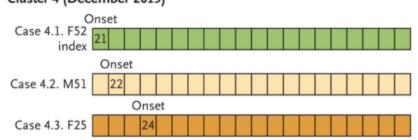
Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
S11	GWHABKH 00000001	Vendor	Seafood	23 Dec	30 Dec	0 %	L/B

## Additional information about this case:

Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

## Cluster 4 (December 2019)



## Discussion of this case:

Note from Francisco: Francisco

7:37 PM Sep 10

"The raw reads of WIV05 don't correspond to the gisaid-ncbi sequence. The raw reads are low quality (very low sequencing depth) and they don't contain A21137G"

Less than 24h in Integrated

## DRASTIC036

 Age&Sex
 52M1

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 Vendor

 Onset
 2019-12-25

 1st Admission
 2019-12-31

Discharged -Death -

Hospital Dec 31st Jinyintan

Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH IVDC WH190 WHU Other Genbank **GISAID** GW

**NMDC** 

```
CNGB
BioProject
SRP/CRA
SRR/CRR
SAM
Notes
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
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2019-12-24
2019-12-25
2019-12-26
2019-12-27
2019-12-28
                    Central outpatient clinic
2019-12-29
2019-12-30
                    Central outpatient clinic
2019-12-31
                    Jinyintan
2020-01-01
                    Jinyintan
2020-01-02
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2020-01-03
                    Jinyintan
2020-01-04
                    Jinyintan
2020-01-05
                    Jinyintan
2020-01-06
2020-01-07
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2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

References for the above summary:

Additional information about this case:

https://baijiahao.baidu.com/s?id=1654845412197587426&wfr=spider&for=pc

2. Aunt Huang (surnamed), a merchant in the seafood market: The husband and wife have been selling pork in the eastern part of the market for more than 30 years. In Wuhan Jinyintan Hospital, Aunt Huang told the "China Business News" that her husband is 52 years old this year. Both

husband and wife work in the Huanan Seafood Wholesale Market and sell pork non-staple food products in the East District. "We have been in the meat wholesale business for more than 30 years. We have been in the Huanan Seafood Wholesale Market in recent years," said Aunt Huang. The market was closed and her husband was hospitalized, but Aunt Huang did not stop her work. She could only go to the hospital during work breaks to learn about her husband's condition and deliver meals or daily necessities. "After the market was closed, some of the goods from the operators inside could not be taken out. I got up at 12 o'clock in the middle of the night to pick up the goods outside, and then sent them to the hotel." Aunt Huang told reporters that many merchants in the market We have accumulated many customers over the years. During the exchange, the reporter saw that Aunt Huang's hands were rough, her fingers were red and swollen from the cold. "My husband was transferred from another hospital to Jinyintan Hospital on December 31, 2019. The fever was not very serious before, it was more than 38 degrees, but the symptoms have not improved. After being transferred to Jinyintan Hospital, he still has a little fever." Huang Auntie said.

(Aunt Huang is interviewed by reporters at Jinyintan Hospital. Photo/Zhang Jiazhen, reporter of this newspaper) According to the aunt surnamed Huang, her husband began to have symptoms of a cold and fever around December 25, 2019, and it has been more than a week now. At that time, I went to Wuhan Central Hospital, which is closest to the Huanan Seafood Wholesale Market, and went to see that there was no hospitalization. The medical staff heard that it was a merchant of the seafood market and suggested that we go directly to Jinvintan Hospital. "My husband lived on the sixth floor when he first came. He heard that he was a merchant in the Huanan Seafood Wholesale Market, so he moved to the fourth floor." Aunt Huang told reporters that most of the patients in the Huanan Seafood Wholesale Market live in the fourth floor. building. After three days, the hospital asked to pay 6,000 yuan in advance for hospitalization. According to him, the patients in the Huanan Seafood Wholesale Market mainly come from the western district, and there are fewer in the eastern district. The west area mainly sells seafood, chicken, duck and poultry frozen products, while the east area sells more pork. "The goods in the market are the same all over the country, and they are available all over the country." Aunt Huang said, "We are not sure whether people are sick and the goods have anything to do with it." "Two or three days after my husband had a fever, I also had a cold and fever, and it was cured after two days of injections." Aunt Huang said. According to the reporter's understanding, the environment of the Huanan Seafood Wholesale Market has not been very good. Although it will be disinfected from time to time, the ventilation is very poor. Most of the products sold are frozen, and the environment is very humid after the ice has melted. Aunt Huang told reporters that a fire broke out in the west area of the market more than two months ago. A shop selling dry goods caught fire. It started to burn at 2:30 in the morning, and it was only after 7:00 that the fire was put out. "The dry seasonings such as chili peppers were burned. The smoke was very strong at that time, and it was particularly choking. All the 11th and 12th streets in the West District were burned."

Discussion of this case:

His stall is likely https://aiqicha.baidu.com/company detail 18659722543369

# DRASTIC037

Age&Sex 52M2 Chinese name XXX XXXName Type Positive Wet market Vendor Onset 2020-01-02 1st Admission 2020-01-06 Discharged 2020-01-28

Death N Hospital Dec 31st Jinyintan

Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB- $\mathsf{WH}$ IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB** BioProject SRP/CRA

SRR/CRR

SAM	-
Notes	-
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
2019-12-05	-
2019-12-06	-
2019-12-07	-
2019-12-08	_
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2020-01-21	Zhongnan
2020-01-22	Zhongnan
2020-01-23	Zhongnan
2020-01-24	Zhongnan
2020-01-25	Zhongnan
2020-01-26	Zhongnan
2020-01-27	Zhongnan
2020-01-28	Zhongnan
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

Linked cases:

References for the above summary:

Additional information about this case:

Discussion of this case:

## DRASTIC038

Age&Sex 53F and 57F2 depending on source

Chinese name XXX
Name XX X
Type Positive

Wet market Exposure to her husband 61M

Onset 2019-12-25

1st Admission 2019-12-31 5 days after onset

Discharged Death Y or ?
Hospital Dec 31st Jinyintan

Lineage E

Cluster Li 1.2, Shen/Huang, CN-WHO 3.2

1st 27 JYT 2nd 41 JYT 28
CN-WHO ICU JYT WIV IPBCAMS-WHHBCDC-HBWH IME-WH IVDC -

WH190 WH19016

 WHU

 Other

 Genbank

 GISAID

 GW

 NMDC

 CNGB

BioProject PRJCA002202, PRJNA605907

SRP/CRA CRA002334, CRA002475, SRP248092

SRR/CRR CRR116154, CRR125935, CRR125943, SRR11059941

SAM SAMC134555, SAMN14081563

Notes

2019-12-01 -

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2019-12-02
2019-12-03
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                    Visit a doctor
2019-12-28
2019-12-29
2019-12-30
2019-12-31
                    Jinyintan
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                    Jinyintan
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2020-01-03
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2020-01-12
                    Jinyintan
2020-01-13
                    Jinyintan
2020-01-14
                    Jinyintan
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2020-01-15	Jinyintan
2020-01-16	Jinyintan
2020-01-17	Jinyintan
2020-01-18	Jinyintan
2020-01-19	Jinyintan
2020-01-20	Jinyintan
2020-01-21	Jinyintan
2020-01-22	Jinyintan
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

#### Linked cases:

DRASTIC006 31F DRASTIC043 61M

## References for the above summary:

WH19016, hidden as raw reads on ncbi/sra, 53F (as well as nmdc under nCov7 name)

https://www.ncbi.nlm.nih.gov/biosample/14081563

In the paper on WH19016

https://academic.oup.com/cid/article/71/15/713/5780800

Among the 8 patients with COVID-19, patients nCoV4 (61M, WH19004) and nCoV7 (53F, WH19016) were from the same household, with dates of symptom onset differing by 5 days; thus, transmission from patient nCoV4 to patient nCoV7 is highly suspected, especially considering that only patient nCoV4 had been to the Huanan seafood market in Wuhan, the starting point of the outbreak and the suspected source.

In the supplementary table 1

	ID	Gender	Age	Clinical lab	Days after onset	ICU	Outcome
WH19001	nCov1	female	49	Negative	8	N	Recovered
WH19002	nCov2	female	52	Negative	8	Y	Recovered
WH19003	nCov3	male	40	Negative	15	Y	Recovered
WH19004	nCov4	male	61	Negative	12	Y	Deceased
WH19010	nCov5	male	40	Negative	8	N	Recovered
WH19012	nCov6	male	56	Negative	10	Y	Recovered
WH19016	nCov7	female	53	Negative	7	N	Recovered
WH19053	nCov8	male	41	Negative	4	N	Recovered

#### The 41 Jinyintan paper in the Lancet

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159299/

says that the wife of the 1st death (whence 61M) was hospitalized and is 53yo,

Whereas Li cluster 1 and WHO cluster 3 say that she is 57yo.

#### Whence

53F are 57F2 are the same person.

Additional information about this case:

#### Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

#### Cluster 1 (December 2019)



<u>Cluster 3</u>; there were two confirmed cases, living together as husband and wife, and both of them denied animal contact history and history of travel. Spouse one, 61 years old, fell ill on 20 December 2019; Spouse two, 57 years old, fell ill on 25 December 2019. Spouse one had been engaged in restaurant distribution for a long time, and often stocked up in Huanan Market. Spouse two denied a history of exposure to Huanan Market or other markets.



Possible source of infection: Spouse one might be infected from environmental exposure in Huanan Market, and spouse two was likely to be infected from spouse one.

Discussion of this case:

CT scans of this patient are visible in Fig.3 of Huang et al https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext

Previous Note from Francisco

53F = 57F2 (spouse of 61M). There is one typo somewhere in one of these two groups 5:24 AM Sep 4

- Huang et al. (2020), Shen et al. (2020) and WH19016 -> 53F
- Li et al. (2020) and Joint China WHO report --> 57F

Commented [7]: this needs figuring out

Commented [8]: @Done

DRASTIC039

 Age&Sex
 56M

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 Vendor

 Onset
 2019-12-20

 1st Admission
 2019-12-30

Discharged Death N
Hospital Dec 31st Jinyintan
Lineage B

Cluster CN-WHO 4.1

1st 27 JYT 1
2nd 41 JYT 1
CN-WHO S08
ICU JYT ICU-10
WIV WIV07
IPBCAMS-WHHBCDC-HB- -

WH -IME-WH IME-WH04

IVDC -

WH190 WH19012

WHU - Other -

Genbank MN996531, MT291829

GISAID EPI\_ISL\_402130, EPI\_ISL\_529216

GW GWHABKO00000000

NMDC - CNGB -

 BioProject
 PRJCA002163, PRJCA002202, PRJNA605907, PRJNA605983

 SRP/CRA
 CRA002334, CRA002423, CRA002475, SRP248092, SRP249613

 SRR/CRR
 CRR116153, CRR122279, CRR122286, CRR125936, CRR125944,

SRR11059942, SRR11092059, SRR11092064

SAM SAMC133240, SAMC134554, SAMN14081562, SAMN14082200

Notes

2019-12-01 -2019-12-02 -2019-12-03 -2019-12-04 -2019-12-05 -2019-12-06 -2019-12-07 -

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2019-12-08
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2019-12-15
2019-12-16
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                    Visit a doctor
2019-12-21
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2019-12-30
                    Jinyintan
                    Jinyintan
2019-12-31
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2020-01-18
2020-01-19
2020-01-20
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2020-01-21 2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

Linked cases:

DRASTIC024 45M

# References for the above summary:

WH19012 (nCov6) 56M collected on Dec 30

https://www.ncbi.nlm.nih.gov/biosample/SAMN14081562 https://ngdc.cncb.ac.cn/biosample/browse/SAMC134554 https://ngdc.cncb.ac.cn/biosample/browse/SAMC355631

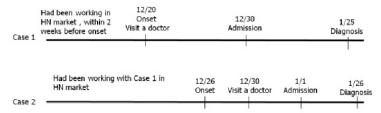
#### **CN-WHO Report**

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
S08	EPI_ISL_52 9216	Vendor	Seafood	20 Dec	30 Dec	0 %	L/B

80 9		2019/12/30	WIV07	8001, 9534	9534(Coverage<10 )	Illumina MiSeq, MGISEQ 2000	11	0.02
S08	2019/12/20	2019/12/30	SARS-CoV- 2/Wuhan_IME- WH04/human/2019/ CHN	//	//	Ion Torrent X5Plus	45	0.51

<u>Cluster 4</u>: There were two confirmed cases, both of whom were employees of the same stall in Huanan Market, and both of them denied contact history of poultry and animals, as well as contact history of travel. Employee one, 56 years old, fell ill on 20 December 2019; employee two, 45 years old, fell ill on 26 December 2019. It was a fixed stall in the Huanan Market, dealing in aquatic products such as catfish and perch.



Possible source of infection: Employee one might be infected from environmental exposure in Huanan Market, and employee two might be infected from environmental exposure in Huanan Market or human-to-human transmission.

Additional information about this case:

Linked case 45U

#### Discussion of this case:

https://www.nature.com/articles/s41586-020-2012-7/tables/1

Says onset on Dec 20 and admitted on Dec 20 which is likely a mistake.

#### Note from Francisco

Less than 24h in Integrated.

Could be a relative that was transferred despite not being formally a patient in Integrated. Or maybe less than 24h in other hospital.

# DRASTIC040 Wei the shrimp seller

Age&Sex 57F1
Chinese name 魏桂先
Name Guixian Wei

Type Originally Suspected, like confirmed

 Wet market
 Vendor

 Onset
 2019-12-10

 1st Admission
 2019-12-18

 Discharged
 2020-02-15

Death N Hospital Dec 31st Union Lineage -

Cluster

1st 27 JYT 17 note that she didn't go to Jinyintan

 2nd 41 JYT
 17

 CN-WHO

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

 WH

 IME-WH

 IVDC

 WH190

 WHU

Other Environmental sample IVDC-HBF54 from her stall West 2nd, 14

Genbank GISAID GW NMDC CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 -

2019-12-05	
2019-12-06	_
2019-12-07	-
	-
2019-12-08	-
2019-12-09	-
2019-12-10	Clinic
2019-12-11	Clinic
2019-12-12	Red Cross
2019-12-13	Clinic
2019-12-14	Clinic
2019-12-15	Clinic
2019-12-16	Union
2019-12-17	-
2019-12-18	Union
2019-12-19	Union
2019-12-20	Union
2019-12-21	Union
2019-12-22	Union
2019-12-23	Union
2019-12-24	Union
2019-12-25	Union
2019-12-26	Union
2019-12-27	Union
2019-12-28	Union
2019-12-29	Union
2019-12-30	Union
2019-12-31	Union
2020-01-01	Union
2020-01-02	Union
2020-01-03	Union
2020-01-04	Union
2020-01-05	Union
2020-01-06	Union
2020-01-07	Union
2020-01-08	Union
2020-01-09	Union
2020-01-10	Union
2020-01-11	Union
2020-01-12	Union
2020-01-13	Union
2020-01-14	Union
2020-01-15	Union
2020-01-16	Union
2020-01-17	Union

2020-01-18	Union
2020-01-19	Union
2020-01-20	Union
2020-01-21	Union
2020-01-22	Union
2020-01-23	Union
2020-01-24	Union
2020-01-25	Union
2020-01-26	Union
2020-01-27	Union
2020-01-28	Union
2020-01-29	Union
2020-01-30	Union
2020-01-31	Union
check	-

Babar: quite obvious that she is the 57F shrimp seller in thepaper's overlay, so that 57F3 simply doesn't exist.

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
17	江汉区	女57	个体户:售卖虾类
	Jianghan	Female	Self-employed: selling shrimp

She is likely lab confirmed due to the figure p.146 of the WHO annexes showing that among the 174 December cases, all those with onset before Dec 16 were laboratory confirmed.

#### Linked cases:

Connected to DRASTIC032 by the NAME Clinic/ pharmacy

Connected to  $\underline{\mathsf{DRASTIC029}}$   $\underline{\mathsf{DRASTIC027}}$   $\underline{\mathsf{DRASTIC055}}$   $\underline{\mathsf{DRASTIC030}}$  by the Huanan Market

Knowledge of the Mahjong cluster

Suspects infection via shared toilet, certainly the ones 5th street seen p.12 of <a href="https://downloads.vanityfair.com/ecohealth-alliance/peter-daszak-powerpoint.pdf">https://downloads.vanityfair.com/ecohealth-alliance/peter-daszak-powerpoint.pdf</a>

<u>Potentially this is Ms Wei's clinic</u>, based on video interview with the paper Potential link to <u>DRASTIC049</u> via the clinic

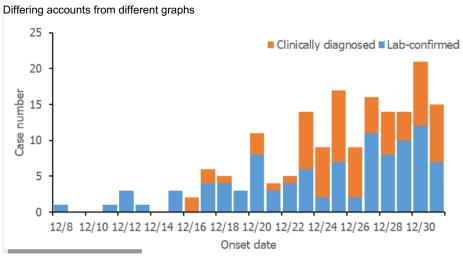
An environmental sequence (env/Wuhan/IVDC-HBF54) was obtained on Jan 1 in Wei's stall. But <u>a WSJ article</u> says that Wei's daughter was infected as well, in Mid-January, and in hospital in February, so although the dates don't match the environmental sequence doesn't have to result from Wei's infected droplets.

Anyway this is circumstantial evidence that Wei, although not mentioned as officially confirmed, was indeed infected by SARS-CoV-2.

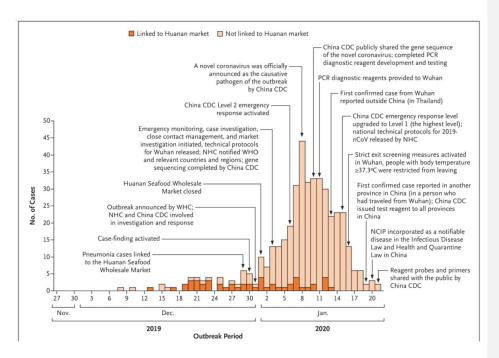
## References for the above summary:

Hospitalisation and onset dates in WSJ article, early Coronavirus missteps: <a href="https://archive.md/9a5jm">https://archive.md/9a5jm</a>
Wei's interview with the paper
Wei's interview with WHO ELSE

#### Additional information about this case:



China WHO report (page???) - where is her sample if confirmed? Why wasnt she on original maps?



Li et al - not linked to market The lancet - red december 10th surel

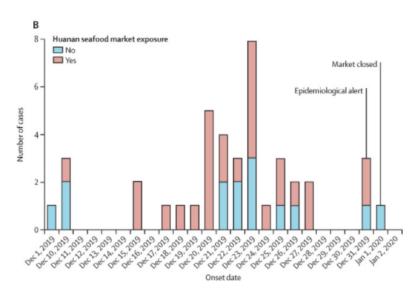


Figure 1 Date of illness onset and age distribution of patients with laboratory-confirmed 2019-nCoV infection V Show full caption

If they knew she was a patient, I'd like to see where it says that in the WHO report. The existing data seems to point to a different patient on that date.

Something about this to go in case discussion perhaps

Her case is mostly mentioned in the news. The Dec10 case (as you can see) is someone else (48F). Wei Guixian I don't think is in the WHO, Lancet and other papers. I was surprised by this as well, but the more I looked, the more I realized the shrimp vendor source is just news sites. Made popular by WSJ where her medical record is disclosed.

Did she have covid19? Probably. But I don't think she's part of the official reports.

Wei has remarked that she doesn't play mahjong [alt: cards] indicating knowledge of a cluster of which she may not be part (reference is the video transcription?

Selected quotes from WSJ, China's early coronavirus missteps

https://archive.md/9a5jm

**Commented** [9]: Contains quotes from doctor about family cluster

...It was on Dec. 10 that Wei Guixian, a seafood merchant in this city's Hua'nan market, first started to feel sick. Thinking she was getting a cold, she walked to a small local clinic to get some treatment and then went back to work.

Eight days later, the 57-year-old was barely conscious in a hospital bed, one of the first suspected cases in a coronavirus epidemic that has paralyzed China and gripped the global economy. The virus has spread around the world and sickened more than 100,000. For almost three weeks, doctors struggled to connect the dots between Ms. Wei and other early cases, many of them Hua'nan vendors. Patient after patient reported similar symptoms, but many, like her, visited small, poorly resourced clinics and hospitals. Some patients balked at paying for chest scans; others, including Ms. Wei, refused to be transferred to bigger facilities that were better-equipped to identify infectious diseases.

. . .

"A lot fewer people would have died" in China had the government acted sooner, said Ms. Wei, in an interview on Feb. 16. She is now fully recovered and back home in the two-bedroom apartment she has barely left for almost two months. Her daughter, infected in mid-January, was still in a field hospital, she said.

. . .

Ms. Wei, the market vendor who fell sick on Dec. 10, first sought help at a small private clinic across the street from her home.

For two consecutive days, she went there to take antibiotics through an intravenous drip, a treatment popular among Hua'nan workers because it was cheap and relatively quick. "It's pretty effective for ordinary colds," she said. "There's always a line inside."

...

# By Dec. 12, however, her condition didn't improve. She rushed to the midsize Wuhan Red Cross Hospital, also near the market.

There, she recalls, a middle-aged doctor informed her that her symptoms were compatible with bronchitis. She was sent home with medicine and told not to worry. After that, **she went back to the private clinic for more antibiotics.** None had any effect.

She took a turn for the worse. On Dec. 16, unable to work and barely able to speak, she showed up at the emergency room of Xiehe (Union) Hospital but was sent home, and got a bed in a respiratory ward there only two days later, after one of her daughters helped make an appointment with a specialist.

She recalls seeing her daughters in tears before she lost consciousness. The older one "would touch me every so often, afraid I would pass away," she said.

When Ms. Wei came around three days later, she was barely able to move, but remembers one doctor surnamed Kong telling her, around Dec. 21, that two other workers from Hua'nan market were at Tongji Hospital, another major one in Wuhan.

...

Early in the morning on Jan. 1, another patient arrived at Dr. Ai's department from the Red Cross Hospital, where Ms. Wei was briefly treated nearly three weeks earlier. The owner of a private clinic near the market had become seriously sick after treating several patients suffering from fever. [Potentially DRASTIC049]

. . .

Back at Xiehe Hospital, Ms. Wei, the seafood vendor, had to undergo a new series of tests, including a throat swab and an endoscopy up her nose and down her airways. Like many other early cases, she couldn't be officially diagnosed with the virus because scientists had yet to genetically decode it and develop a test that would later be widely used

**Even so, her doctors treated her as a suspected case**. They donned masks, isolated her and tried to move her to Jinyintan, but she refused, thinking they were trying to get rid of her because they suspected market workers were unhygienic.

"I thought to myself, I sell clean things," she said. "I sell live shrimp."

. .

Looking back, Ms. Wei thinks she might have been infected via the toilet she shared with the wild meat sellers and others on the market's west side. She said the vendors next to her on both sides got sick, and the man kitty corner from her almost died. One of her daughters, a niece and the niece's husband caught the virus, too.

Commented [10]: who is this and what does kitty corner

Interview with the paper, baoliao (<u>full translation</u>)

https://mega.nz/file/Dzp0zD4A#w8vHGNz aAs5igEkwQ Uczhk6M596hxRMDtuTbuDE4g

Selected quotes from/ relevant to Wei:

...

(00:10) [Ms. Wei]: I started feeling unwell from the 11<sup>th</sup>, and went to a small (clinic) and got two shots, but had no reaction to them. Over a half month I can say the most amazing thing I did was to go buy a few things at the local supermarket [she's being sarcastic]. I didn't go anywhere, you know. I really didn't go anywhere."

. . .

(1:03) [Narrator's text]: Ms. Wei operated a live shrimp business at Huanan Seafood Market. On Dec. 11<sup>th</sup>, she began to have fever symptoms, the first diagnosed patient with ties to Huanan Seafood Market. She has rented for a long time in a residential building near the market, less than 500 straight-line meters from the market. After developing symptoms, she immediately went to get medical treatment at a clinic downstairs [from her].

(1:20) [Ms. Wei]: How I got sick is like this: I felt a little tired, just like in previous years. This year I wasn't yet tired, not yet that tired. In the past, every year when winter arrived, I'd always get a little flu or something. At that time I thought it was the flu. I wasn't feeling well. I was dizzy. It felt like a very minor illness. Nothing significant was showing up. I started feeling unwell on the 11<sup>th</sup> and went to a small (clinic) and got two shots, but

had no reaction to them. In the past, as soon as I felt a little unwell, I'd always immediately go get a shot. Since I have a business, I can't delay. Every time I've gotten a shot, the next day I clearly start getting better. But this time the two shots were ineffective. So I went to the Eleventh Hospital thinking I'd get a better shot there, but the doctor there didn't see me as someone famous so he gave me a pill and didn't say anything else. That took the whole day. Having to wait in line at a big hospital is a big hassle. So then I went to a small hospital to get a shot. There they gave me another two shots. He said it's "a different medication...a different medication." I said "How is it you're giving me more shots that have no effect?" (Later on): Then I started feeling worse, no strength, couldn't keep my energy up. On Dec. 16th I then went to Wuhan Union Hospital. On the morning of the 15<sup>th</sup> I even did some business. I remember that after I got to (Union) hospital, the doctor said you're still very sick. There's also several others of you Huanan (market) folks. It's all you Huanan people. [Other sources say the doctor told her this after she regained consciousness on the 21st]. At the time I thought that was strange. What's with Huanan? What does it mean? There were a LOT of people at the hospital. Anyway from what some people I know were saying, people that had gotten shots at that little clinic - I know them - when they went to that (little clinic) there were so many people there all lining up to get shots. A lot of us Huanan folks get our shots there."

[... narrator's notes on clinics and interview with Chen, see full translation for details

(5:09) [Narrator text]: In a situation similar to Mr. Chen's, Ms. Wei also hasn't figured out how she got infected. All the times she's thought back on her life path leading up to her sickness, other than the supermarket, market, and home, she didn't go anywhere else.

(5:21) [Ms. Wei]: (Voice of Ms. Wei). I remember that for the half month before I got sick, it seems I didn't go anywhere. I don't play mahjong. Usually, when I'm done with my business, I just go home and rest. I can say the most amazing thing I did was to go buy a few things at the local supermarket. A lot were things my daughter bought for me on the internet. I think I basically didn't go for walks anywhere. I don't think I went anywhere. (As for friends), I just chatted on the phone. We didn't get together.

(5:40) [Interviewer]: Before (you got sick) it was always you and your lover living here, right?

(5:44) [Ms. Wei]: Right.

[Interviewer]: Nothing happened to your lover?

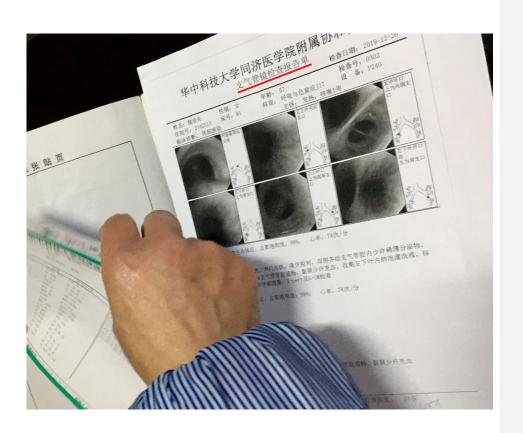
[Ms. Wei]: No, he's fine. (In the market) the supplies [of shrimp, presumably] are all sent over by other people. Early on it was all Liangzi Lake [梁子湖] people bringing the goods. They'd directly send them over to us here and give us wholesale. Later they [the shrimp,

presumably] were sent over from Jiangsu (江苏). As for selling, I sell to hotels. It's all designated clients that come to get them [buy]. I didn't go anywhere. I really didn't go anywhere.

Medical records from Tongji hospital in the WSJ:

How It All Started: China's Early Coronavirus Missteps

https://archive.md/9a5jm Where is the video interview





Epoch Times Environmental sampling PDF: https://bit.ly/3GitykP From https://www.epochtimes.com/gb/20/5/31/n12150755.htm

	I					
编号	摊位编号/名称	样本类型	rRT-PCR	N基因特异扩增	S基因特异扩增	二代測序
Will J	NAME OF STREET OF STREET		结果	測序(同源性)	测序(同源性)	(同源性)
E61	东 6-1、3 号	地面	+	NA	NA	NA
E48	东 9-22 号	门前地面血水	+	+(99%)	NA	NA
D32	西区 15 街 15 号	小推车表面	+	NA	NA	NA
B17	西区 15 街 X44 号(水产)	称	+	NA	NA	NA
G93	西区八街 19、21、23 号	污水	+	NA	NA	NA
F54	西区二街 14 号,魏氏小鱼小虾	地面	+	+(99%)	NA	+(99%)
F33	西区二街 17 号,黎氏鳝鱼泥鳅	闸门	+	NA	NA	NA
F46	西区二街 24 号,伟伟海鲜批发	地面	+	+(99%)	+(99%)	NA
E7	西区二街 5号	门口泡沫台	+	+(99%)	NA	NA
A20	西区七街 15、17 号	手套	+	+(99%)	+(99%)	NA
A18	西区七街 15、17号	鞋套鞋底	+	NA	NA	NA
A2	西区七街 15、17 号	地表面	+	+(99%)	NA	NA
A63	西区七街 16、18号	地面	+	NA	+(99%)	NA



#### Partial Translation:

numb er	Booth number/name	Type of sample	rRT-PCR result	N gene-specific amplification Sequencing (homology)	S gene-specific amplification Sequencing (homology)	second- generation sequencing (homology)
E61	6-1, 3 East	terrestrial	+	NA	NA	NA
E48	9-22 East	Blood and water on the ground in front of the door	+	+(99%)	NA	NA
D32	15 15th Street, West End	Cart surface	+	NA	NA	NA
B17	X44 15th Street, West End (Fisheries)	weigh	+	NA	NA	NA
G93	19, 21, 23 8th Street, West End	sewer	+	NA	NA	NA
F54	Wei's Small Fish and Shrimp, 14 West 2nd Street	terrestrial	. <	+ (99%)	NA	+(99%)
F33	Lai's Eel & Loach, 17 Second Street, Western District	sluice gate	+	NA	NA	NA
F46	Wai Wai Seafood Wholesale, 24 Second Street, Western District	terrestrial	+	+(99%)	+(99%)	NA

Sample ID=F54 (based on other sample names not believed to suggest name and age) Description=西区二街 14 号,魏氏小鱼小虾

西区 West district

二街 Second street

14 号 Number 14

魏氏小鱼小虾 Wei's fish and shrimp

Note that the name 'Wei', (魏), in 'Wei's fish and shrimp' (魏氏小鱼小虾) is identical to Wei's name on her medical records.

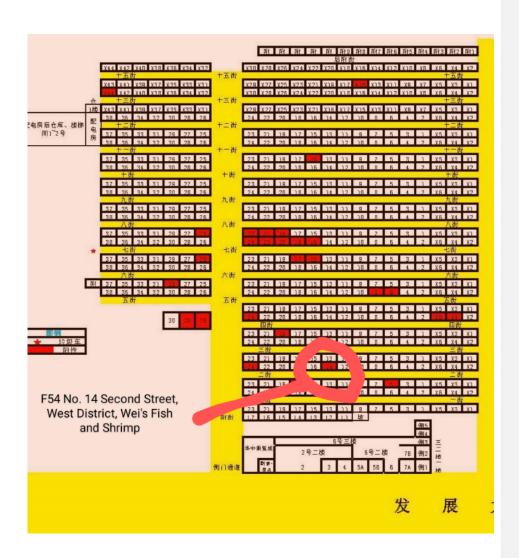
The name 魏 is shared by 0.45% of China's population. With approx 600 stalls at the market we may expect 2.7 stall owners at this prevalence, but 魏 is underrepresented in Hubei.

Given that this sample is from a shrimp seller named 魏 in the west of the market, as well as a location they have chosen to test, we believe balance of probability strongly suggests this is Wei Guixian.

Map of positive environmental samples from Epoch Times:

Full (hires, zoom in)





#### Wei's business

https://aiqicha.baidu.com/company\_detail\_16132702586155 https://www.11467.com/qiye/91629106.htm https://archive.vn/RmRJH#selection-2615.21-2615.40

Addresses listed confirm her location on street 2, number 14 Correlates with her full name - **this is her business.** 

## Location and name of stall confirmed

Using the research by babar:

http://babarlelephant.free-hoster.net/visiting-the-wuhan-seafood-market/?i=1

Correlates with store address, Epoch times map of positive environmental samples and WHO report map.

Photo here: <a href="https://www.meipian.cn/6ghsv2o">https://www.meipian.cn/6ghsv2o</a>

Archived: <a href="https://archive.vn/JnRow">https://archive.vn/JnRow</a>



The sign for Wei's stall, 魏氏小鱼小虾, Wei's fish and shrimp, is visible top right here,



Entrance of the street, facing the other direction

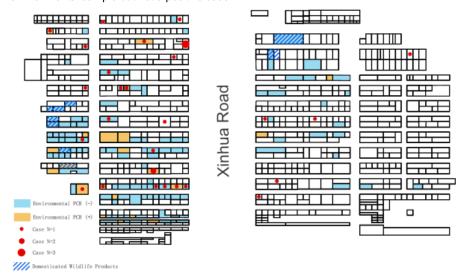


A shot from a vantage point right outside Wei's stall, showing some of her neighbours

#### Original and updated WHO maps

Original from China-WHO joint report

CHina-WHO report - China part page 98 - in this map Wei's stall is marked as a positive environmental sample but not a positive case

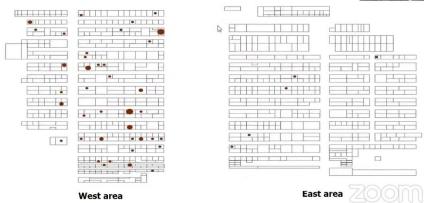


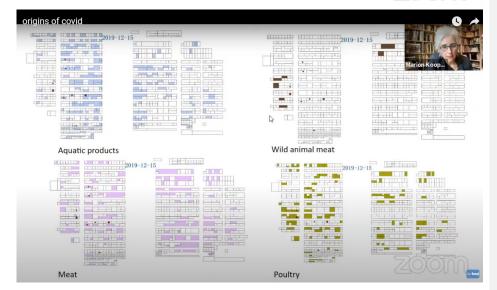
In a talk from Koopmans she presents a different version of the market map, which is in fact one sent by the Chinese in 2020, before writing the WHO report.

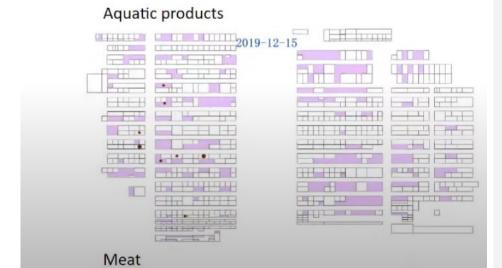
We now see Wei's stall (NOTE circled above on epoch times map) is marked as a positive case











#### Probable environmental sequence

We suspect that env/Wuhan/IVDC-HBF54/2020|EPI\_ISL\_408512|2020-01-01 may be the sequence from Mrs Wei's stall Why do we think this?

## Discussion of this case:

#### Two different patients with Dec 10 onset

Wei's medical report wasn't gold standard for crossing line for covid positive testing. She's a suspected/probable patient. The Dec 10 patient in the reports is 48F and went to different hospital transfer route - ended up in Tongji on Dec24. Wei ended up in Union on Dec 16. There's two different patients with Dec10 onset.

-engineer

Commented [11]: removed: Where is Wei's environmental sequence?

That's the question, the CDC document in the epoch times article says that they have a sequence for W2 No 14

#### Why not confirmed

Probably because she refused to be transferred to a larger hospital (probably Jinyintan). That could be why she was not "laboratory-confirmed." Her status as COVID-infected may have been based on virtually everything except testing of the virus's genome.

Full article: https://archive.md/9a5jm

Notes on all the inconsistencies surrounding the case and the fact that the WHO seem to be ironing some of them out

#### Francisco's comments in his sheet

#### Francisco

5:24 AM Sep 4

"Eight days later, the 57-year-old was barely conscious in a hospital bed", "On Dec. 16, unable to work and barely able to speak, she showed up at the emergency room of Xiehe Hospital but was sent home, and got a bed in a respiratory ward there only two days later, after one of her daughters helped make an appointment with a specialist"

#### Francisco

5:24 AM Sep 4

"It may be 武汉众生门诊部, at 武汉市江汉区陈家墩1号

At the 1:39 mark of The Paper video, right as Ms. Wei is describing going to a small clinic to get shots, the video shows that clinic. It's possible the journalist just picked a random clinic in the area, but it would have been more convenient to film the one Ms. Wei went to, which she describes as right downstairs from where she lives, if he was interviewing her in person."

## DRASTIC075

 Age&Sex
 57U

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 Vendor

 Onset
 2019-12-25

 1st Admission
 2019-12-30

Discharged - Death -

Commented [12]: do we know if it was to be jinyintan

Hospital Dec 31st -Lineage -

Cluster WHO cluster 2.3

**ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW **NMDC** CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19

2019-12-20 2019-12-21

2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

### Linked cases:

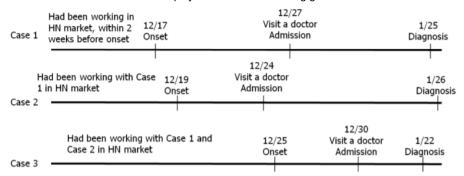
32M and 40M DRASTIC008 and DRASTIC014 by, cluster 2 of China-WHO joint report

No reason to assume that the 57U of WHO Cluster 2.3 is the same person as the 57F in thepaper's overlay.

All the reasons to assume that the latter is Mrs Wei.

### Cluster 2 of China-WHO report annexes

Cluster 2: there were 3 confirmed cases, all of whom were traders of the same stall in Huanan Market. Stall employee one, 40 years old, fell ill on 17 December 2019; stall employee two, 32 years old, fell ill on 19 December 2019; stall employee three, 57 years old, fell ill on 25 December 2019. It was a fixed stall in Huanan Market, dealing in frozen products such as pastry and soy products. Employee two was purchasing goods from the Baishazhou market and Huanan Market back and forth. Employee three was delivering goods in Huanan Market.



Possible sources of infection: employee one might be infected from environmental exposure in Huanan Market, employee two and employee three might be infected from market environmental exposure or human to human transmission

### DRASTIC041

 Age&Sex
 57U

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 No

Onset 2019-12-22

1st Admission 2019-12-25 CN-WHO 5.1

<u>Cluster 5:</u> there were two confirmed cases, living together as husband and wife. Both of them denied exposure to Huanan Market, confirmed exposure to Jinyinhu Farmers Market, denied contact history of poultry and animals, and denied history of travel. Spouse one, 57 years old, fell ill on 22 December 2019; spouse two, 58 years old, fell ill on 24 December 2019.



Possible source of infection: Spouse one be infected from Jinyinhu market environmental exposure or community exposure; They might be infected from human-to-human transmission or Jinyinhu market environmental exposure or community exposure.

# DRASTIC042

 Age&Sex
 58U

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 No

Onset 2019-12-24 1st Admission 2019-12-27 CN-WHO 5.2 <u>Cluster 5:</u> there were two confirmed cases, living together as husband and wife. Both of them denied exposure to Huanan Market, confirmed exposure to Jinyinhu Farmers Market, denied contact history of poultry and animals, and denied history of travel. Spouse one, 57 years old, fell ill on 22 December 2019; spouse two, 58 years old, fell ill on 24 December 2019.



Possible source of infection: Spouse one be infected from Jinyinhu market environmental exposure or community exposure; They might be infected from human-to-human transmission or Jinyinhu market environmental exposure or community exposure.

#### He may be 58M DRASTIC042 bis from

http://wjw.hubei.gov.cn/bmdt/ztzl/fkxxgzbdgrfyyq/xxfb/202001/t20200125 2014855.shtml

# DRASTIC042 bis

Age&Sex 58M
Chinese name XXX
Name Yang
Type Positive
Wet market ?

Onset 2019-12-23

1st Admission ?

Discharge 2020-01-23

Dead Y

2020-01-01 Jinyintan

2020-01-16 Jinyintan (ECMO) 2020-01-23 Jinyintan (death)

#### http://wjw.hubei.gov.cn/bmdt/ztzl/fkxxgzbdgrfyyq/xxfb/202001/t20200125 2014855.shtml

Yang Moumou, male, 58 years old, was transferred to Jinyintan Hospital on January 1, 2020 due to "cough and expectoration for 9 days and fever for 5 days". On admission, the patient had high fever and chest CT showed double pneumonia lesions. The diagnosis was severe pneumonia, viral pneumonia, and respiratory failure. After admission, anti-inflammatory, anti-infective, high-flow oxygen inhalation and other treatments were given. On January 16, he

received tracheal intubation-assisted ventilation and ECMO treatment, and was complicated by sepsis and septic shock. The patient died of respiratory and circulatory failure at 17:01 on January 23.

He may be the same patient as Drastic042 58U from the WHO cluster 5.

# DRASTIC043 Zeng

 Age&Sex
 61M

 Chinese name
 曾XX

 Name
 XX Zeng

 Type
 Positive

 Wet market
 Purchaser

 Onset
 2019-12-20

 1st Admission
 2019-12-27

Discharged 2020-01-09, 1st death

Death Y Hospital Dec 31st Jinyintan

Lineage E

Cluster Li 1.1, Shen/Huang, CN-WHO 3.1

1st 27 JYT 7 2nd 41 JYT 7

CN-WHO S05, Cluster 3.1

ICU JYT - WIV -

IPBCAMS-WH- IPBCAMS-WH-05 (not sure at all, like not at all)

HBCDC-HB- -WH -IME-WH -

IVDC IVDC-HB-04 WH190 WH19004

WHU -Other -

Genbank MT019533

GISAID EPI\_ISL\_402120, EPI\_ISL\_403928

GW GWHABKJ00000000

NMDC NMDC60013002-09, NMDC60013085-01

CNGB -

```
BioProject
SRP/CRA
                   CRA002334, CRA002475, SRP248092
SRR/CRR
                   CRR116151, CRR125938, CRR125946, SRR11059944
SAM
                   SAMC133245, SAMC134552, SAMN14081560
Notes
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
2019-12-14
2019-12-15
2019-12-16
2019-12-17
2019-12-18
2019-12-19
2019-12-20
                   Visit a doctor
2019-12-21
2019-12-22
2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
                   Puren
2019-12-28
                   Puren - ICU
2019-12-29
                   Puren
2019-12-30
                   Puren
2019-12-31
                   Jinyintan - ICU
2020-01-01
                   Jinyintan
2020-01-02
                   Jinyintan
2020-01-03
                   Jinyintan
2020-01-04
                   Jinyintan
2020-01-05
                   Jinyintan
2020-01-06
                   Jinyintan
2020-01-07
                   Jinyintan
2020-01-08
                   Jinyintan
```

PRJCA002165, PRJCA002202, PRJNA605907

2020-01-09	Jinyintan
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

# Linked cases:

DRASTIC038 and DRASTIC006 cluster 1 in Li et al 2020

# References for the above summary:

The IPBCAMS-WH-05 doesn't match WH19004 and IVDC-HB-04 that are identical. https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=GWHABKJ00000001

The onset Dec 20 and admission 27 fit

"Died", "Worked in the market"

## **CN-WHO Report**

There is a problem with the sequences and raw reads. The WHO report p.72 says that the three 61M sequences IPBCAMS-WH04 WH19004 IVDC-HB-04 are the same patient, but IPBCAMS-WH-04 doesn't have the C27493T and C28253T mutations. Neither did the raw reads they obtained for WH19004. Same problem with the WH19004 raw reads recently published by the China CDC, see

 $\underline{\text{https://twitter.com/babarlelephant/status/1514947538499129345?s=20\&t=21OaPBXT48NzCLxi}}\\ \underline{\text{RN4QsA}}$ 

		2019/12/30	BetaCoV/Wuhan/IP BCAMS-WH- 04/2019	//	376(iSNV) <sup>a</sup>	Illumina NextSeq 500	1
S05	2019/12/20	2020/01/01	BetaCoV/Wuhan/W H19004/2020	27493, 28253	//	NGS	:
		2020/01/01	BetaCoV/Wuhan/IV DC-HB-04/2020	27493, 28253	NA	missing	

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
S05	EPI_ISL_40 3929	Purchaser		20 Dec	30 Dec	0	L/B
503	NMDC6001 3002-09	Purchaser		20 Dec	1 Jan	0 %	L/B

Annexes p.157

<u>Cluster 3:</u> there were two confirmed cases, living together as husband and wife, and both of them denied animal contact history and history of travel. Spouse one, 61 years old, fell ill on 20 December 2019; Spouse two, 57 years old, fell ill on 25 December 2019. Spouse one had been engaged in restaurant distribution for a long time, and often stocked up in Huanan Market. Spouse two denied a history of exposure to Huanan Market or other markets.



Possible source of infection: Spouse one might be infected from environmental exposure in Huanan Market, and spouse two was likely to be infected from spouse one.

#### Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

#### NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

https://archive.fo/zORUI

一、曾XX,男,61岁,既往有肝硬化、粘液瘤等病史。2019年12月20日左右开始发热,咳嗽、无力;27日在武汉市普仁医院呼吸科住院治疗,28日转入ICU,30日予气管插管机械通气,31日转金银潭医院ICU;转入时休克昏迷状态。1月1日ECMO支持、抗感染、抗休克、纠正酸中毒等对症支持治疗。1月9日20时47分患者心率突然为0,ECMO血流速快速降至0.2升/分。立即抢救,至23时13分,心率仍为0,宣布临床死亡。

#### Translation

1. Zeng XX, male, 61 years old, with a history of liver cirrhosis and myxoma. He started to have fever, cough and weakness on December 20, 2019; he was hospitalized in the

Respiratory Department of Wuhan Puren Hospital on the 27th, transferred to the ICU on the 28th, and mechanically ventilated with tracheal intubation on the 30th, and transferred to the ICU of the Jinyintan Hospital on the 31st; Shock and coma at the time. On January 1, symptomatic and supportive treatments such as ECMO support, anti-infection, anti-shock, and acidosis correction. At 20:47 on January 9th, the patient's heart rate suddenly dropped to 0, and the ECMO blood flow rate dropped rapidly to 0.2 L/min. He was rescued immediately. By 23:13, his heart rate was still 0 and he was declared clinically dead.

Wuhan Municipal Health Commision

http://wjw.wuhan.gov.cn/front/web/showDetail/2020011109036 https://archive.fo/lllhp

Question: There is currently a death case. What is the specific situation?

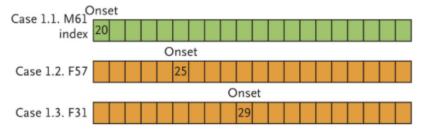
Answer: The patient is a 61-year-old male who was admitted to the hospital due to respiratory failure and severe pneumonia. He also suffered from abdominal tumors and chronic liver disease. The patient purchases goods at the South China Seafood Market in Wuhan all year round. After admission to the hospital, he was given symptomatic support, anti-infection, ventilator-assisted breathing, continuous ECMO extracorporeal life support, and other treatments. The symptoms did not improve. On the evening of January 9, 2020, the heart stopped and died after rescue. The pathogenic test results indicated that the new coronavirus was positive for nucleic acid. The death was diagnosed as severe pneumonia, acute respiratory distress syndrome (severe), septic shock, multiple organ failure, severe acid-base metabolism disorder, and liver cirrhosis. The immediate cause of death was respiratory and circulatory failure.

## Additional information about this case:

Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

# Cluster 1 (December 2019)



### https://y.dxy.cn/carticle/676638.html

Including the first case of death after infection in Wuhan, which was also transferred from our hospital. The patient has a history of contact with the Huanan Seafood Market, and their family of three or four were infected." Cheng Dezhong said.

### Discussion of this case:

Note from Francisco

Francisco

5:24 AM Sep 4

Ren et al. (2020)

Bronchoalveolar lavage fluid (BAL) samples were collected from five patients hospitalized with pneumonia in Wuhan Jinyintan Hospital, Wuhan, Hubei province, China from December 18 to 29, 2019

# DRASTIC044

Age&Sex 62F1
Chinese name XXX
Name XX X

Type Positive Wet market No

Onset 2019-12-15 1st Admission 2019-12-26

Discharged Death N
Hospital Dec 31st Jinyintan

Lineage -

Cluster Zhou, Xinhua 1.1, CN-WHO 1.1

1st 27 JYT 27 2nd 41 JYT 27 CN-WHO -

ICU JYT ICU-02

WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM

Notes
2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 -

2019-12-13	-
2019-12-14	-
2019-12-15	-
2019-12-16	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	Visit a doctor
2019-12-26	Integrated
2019-12-27	Integrated
2019-12-28	Integrated
2019-12-29	Jinyintan
2019-12-30	Jinyintan
2019-12-31	Jinyintan
2020-01-01	Jinyintan
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	Jinyintan
2020-01-12	Jinyintan
2020-01-13	Jinyintan
2020-01-14	-
2020-01-15	-
2020-01-16	_
2020-01-17	-
2020-01-18	_
2020-01-19	_
2020-01-20	_
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-

2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

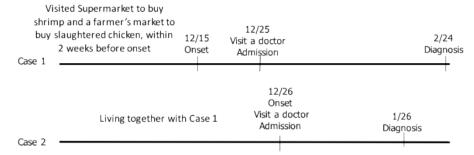
#### Linked cases:

DRASTIC046 first CN-WHO report cluster is husband of this case

# References for the above summary:

### CN-WHO report Cluster 1

Cluster 1: Including two confirmed cases, living together as husband and wife. Both of them denied case contact history, as well as history of exposure to Huanan Market. Spouse one, 62 years old, fell ill on 15 December 2019, spouse two, 62 years old, fell ill on 26 December 2019.

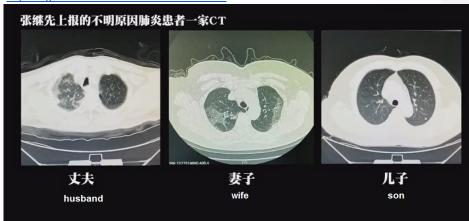


Source of infection: **Spouse one had a travel history to Thailand in November 2019**, so imported infection cannot be ruled out. The married couple had bought shrimps from a Supermarket at Yangchahu, so cold chain food contact history cannot be ruled out either. The couple denied history of exposure to Huanan Market, however they had purchased and contacted chickens slaughtered in a market at Yangchahu, they might have been exposed to infection in other markets. The onset interval between the two was 11 days, because the couple lived together, it cannot rule out the possibility that spouse one was infected by spouse two.

# Additional information about this case:

The most important mistake is the WHO report saying that 62F visited the seafood market https://twitter.com/MichaelWorobey/status/1462259333777874950?s=20 this is not true, confirmed by the authors of the WHO report.

The CT scan of the family, from a video https://3g.163.com/v/video/VYO4G9UV1.html



Discussion of this case:

# DRASTIC045

 Age&Sex
 62F2

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 No

 Onset
 2019-12-27

1st Admission Discharged Death Ν Hospital Dec 31st Lineage Cluster Li 2.1 1st 27 JYT 2nd 41 JYT **CN-WHO** ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** 

 WH190

 WHU

 Other

 Genbank

 GISAID

 GW

 NMDC

 CNGB

 BioProject

 SRP/CRA

 SRR/CRR

 SAM

 Notes

2019-12-01 -2019-12-02 -2019-12-03 -2019-12-04 -2019-12-05 -

2019-12-06	_
2019-12-07	-
2019-12-08	-
2019-12-09	-
2019-12-10	-
2019-12-11	-
2019-12-12	-
2019-12-13	-
2019-12-14	-
2019-12-15	-
2019-12-16	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
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2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

### Linked cases:

DRASTIC047

# References for the above summary:

Li et al (2020)

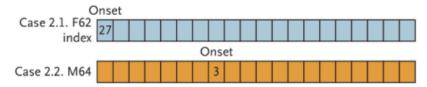
https://www.nejm.org/doi/full/10.1056/nejmoa2001316

# Additional information about this case:

Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

# Cluster 2 (December 2019-January 2020)



Discussion of this case:

# DRASTIC046

Age&Sex 62M Chinese name 张X洲

Name Xzhou Zhang Type Positive Wet market No

Onset 2019-12-12 1st Admission 2019-12-27 Discharged 2020-01-07

Death N Hospital Dec 31st Jinyintan

Lineage A

Cluster Zhou, Xinhua 1.2, CN-WHO 1.2

 1st 27 JYT
 27

 2nd 41 JYT
 27

 CN-WHO
 \$13

 ICU JYT
 ICU-01

 WIV
 WIV01

 IPBCAMS-WH 

HBCDC-HB- -WH -

IME-WH IME-WH01

IVDC -WH190 -WHU -Other -

Genbank MT291826 GISAID EPI\_ISL\_529213

GW -NMDC -CNGB -

BioProject PRJCA002274

SRP/CRA -SRR/CRR -

SAM SAMC137891

Notes

2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26

2019-12-27 Integrated

Integrated
Jinyintan
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# Linked cases:

 $\frac{\mathsf{DRASTIC044}}{\mathsf{DRASTIC009}} \text{ first CN-WHO report cluster is wife of this case} \\ \frac{\mathsf{DRASTIC009}}{\mathsf{DRASTIC009}} \text{ the son from Zhang Jixian's stories}$ 

# References for the above summary:

### Discussion of this case:

The main difficulty is to match Zhang Jixian's family cluster (husband, wife and son) with 62M,62,35M and the sequence IME-WH01. An essential data is that IME-WH01 is lineage A whence probably not related to the market. Then it is a mix of several small evidences that match together:

In the WHO report p.74 it is said that

IME-WH02 = WIV02

IME-WH03 = WIV06

IME-WH04 = WIV07

IME-WH05 = WIV05

So it makes sense that IME-WH01 is in the WIV paper. Being lineage A it must be the non-sequenced patient, the 62M (ICU-01, WIV01) <a href="https://www.nature.com/articles/s41586-020-2012-7/tables/1">https://www.nature.com/articles/s41586-020-2012-7/tables/1</a>

https://www.nature.com/articles/s41586-020-2012-7/tables/2

Patient No.	Gender	Age	Date of Onset	Date of Admission	Symptoms When Admitted	Current Status (2020.01.13)	Diagnosis history
ICU-01*	Male	62	2019.12.12	2019.12.27	fever	recover, discharged	negative
ICU-04	Male	32	2019.12.19	2019.12.29	fever, cough, dyspnea	fever, intermittent cough	negative
ICU-05	Male	40	2019.12.17	2019.12.27	fever (38 °C), expectoration, malaise, dyspnea	fever, malaise, intermittent cough	AdV (IgM)
ICU-06	Female	49	2019.12.23	2019.12.27	fever (37.9 °C), palpitation	fever, malaise, cough	Coronavirus (nt)
ICU-08	Female	52	2019.12.22	2019.12.29	fever (38.5 °C), expectoration, malaise, dyspnea		Streptococcus pneumoniae (nt)
ICU-09	Male	40	2019.12.22	2019.12.28	fever (38.5 °C), expectoration	fever (38.5 °C), malaise, expectoration, dizziness	negative
ICU-10	Male	56	2019.12.20	2019.12.20	fever, dyspnea, chest tightness	fever, malaise, cough, dyspnea	negative

Note, some records are missing. All patients are sellers or deliverymen at the seafood market except ICU-01, whose contact history is unclear. All patients were admitted to intensive care unit (ICU) during the first investigation and were now in stable condition. Blood IgM tests have been performed for the following respiratory pathogens for all patients: Legionella pneumophilia, Mycoplasma pneumoniae, Chlamydia pneumoniae, respiratory syncytial virus, adenovirus, Rickettsia, influenza A virus, influenza B virus and parainfluenza virus.

\*This patient reported fever on 12 December 2019 and then recovered without medical treatment. He came back to the hospital on 27 December 2019 with a fever. His wife was also ill and admitted to the hospital. Both individuals recovered.

	First sampling-2019.12.30					Second samp	ling-2020.01.10	
Patient No.	Test No.	BALF	Oral Swab	Blood (Ab)	Oral Swab	Anal Swab	Blood (PCR)	Blood (Ab)
ICU-01	WIV01	-	Ct=32.0	NA	NA	NA	NA	NA
ICU-04	WIV02#	Ct=17.6	Ct=26.6	NA	-	-	8	+
ICU-05	WIV03	Ct=27.0	Ct=31.9	NA	-	-	-	+
ICU-06	WIV04#*	Ct=18.3	Ct=27.7	+	-	-	-	+
ICU-08	WIV05#	Ct = 24.1	-	NA	NA	NA	NA	NA
ICU-09	WIV06#	Ct=21.6	Ct=29.4	NA	5-0	1-1	-	+
ICU-10	WIV07#	Ct=25.7	Ct=24.0	NA	0.00	3.5	=	+

The WIV samples come from Jinyintan (authors of the paper, collection dates, Jinyintan doctors stories <a href="https://www.weibo.com/ttarticle/p/show?id=2309404483446197059980">https://www.weibo.com/ttarticle/p/show?id=2309404483446197059980</a>)

At this point we know the husband (62M) and wife (62F1) were in Jinyintan on Dec 29 and that there was an onset problem for the husband.

https://www.nature.com/articles/s41586-020-2012-7/tables/1

So we are ready to assemble the clues disseminated in the WHO report

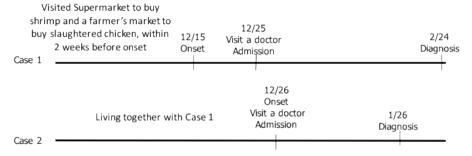
#### page 72 and 74:

S13	2019/12/26	2019/12/30	SARS-CoV- 2/Wuhan_IME- WH01/human/2019/ CHN	4946, 8782, 28144	494	6, 8782, 28144	ThermoFisher S5	Plus	176	0.53
					,					
								4	1946	

S13 EPI_ISL_52 Visitor to another market 26 Dec 30 Dec (ORF1a), 8782 (ORF1a), 28144 (ORF8)	S/A	
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## CN-WHO report Cluster 1

Cluster 1: Including two confirmed cases, living together as husband and wife. Both of them denied case contact history, as well as history of exposure to Huanan Market. Spouse one, 62 years old, fell ill on 15 December 2019, spouse two, 62 years old, fell ill on 26 December 2019.



Source of infection: Spouse one had a travel history to Thailand in November 2019, so imported infection cannot be ruled out. The married couple had bought shrimps from a Supermarket at Yangchahu, so cold chain food contact history cannot be ruled out either. The couple denied history of exposure to Huanan Market, however they had purchased and contacted chickens slaughtered in a market at Yangchahu, they might have been exposed to infection in other

markets. The onset interval between the two was 11 days, because the couple lived together, it cannot rule out the possibility that spouse one was infected by spouse two.

We assume that 62M is spouse two.

# Additional information about this case:

The CT scan of the family, from a video <a href="https://3g.163.com/v/video/VYO4G9UV1.html">https://3g.163.com/v/video/VYO4G9UV1.html</a>



A key information about 62M is in the WHO report.

Fig. 25. Spatial distribution of vendor cases associated with the Huanan market by week of onset.

Other initially suspected cases in December 2019

Three possible cases with disease onset on 1, 2 and 7 December 2019, respectively, were initially identified as potential cases in the retrospective case search and have been included in some published papers. Clinical review of these three cases by the Chinese expert team led to their exclusion as possible cases on the basis of the clinical features of their illness.

In the case with onset on 1 December, a 62-year-old man with past history of cerebrovascular disease was judged to have had a minor respiratory illness in early December, which responded to antibiotics. He developed a further illness with onset on 26 December 2019, which was later laboratory-confirmed to be COVID-19. This patient had no reported contact to the Huanan market, whereas his wife, who was admitted on 26 December with a COVID-19 compatible illness, reported close contact with the Huanan market. She was also later laboratory-confirmed to have COVID-19. This couple, together with their son, became part of the first recognized family cluster of COVID-19.

The underlined sentence is a clear reference to Zhang Jixian's family cluster.

Yes the WHO report says that the wife had close contact with the Huanan market, but this was acknowledged as a mistake in a WSJ article

https://archive.ph/5XoJP#selection-1321.84-1321.86

The WHO, however, also clarified that the first family cluster of infections in Wuhan had no exposure to the Huanan seafood market, although a woman in the group had been to other markets. The report previously gave conflicting information in different sections about the family's links to the market.

The Dec 26 onset is a clear reference to S13 (IME-WH01) the only lineage A December sequence.

The son is 35M thanks to a new video.

See also the "Cases from Interview with Zhang Jixian" paragraph, the handwritten excerpt is compatible with 62M 62F 35M.

https://news.dayoo.com/gzrbyc/202003/07/158752 53178478.htm

For example, the place where the old couple lives is two bus stops at the South China Seafood Market.

### https://zenodo.org/record/6299116#.YhrLU0 MKmy

In his preprint Worobey identified where 62M and 62F live from one of the WHO map

For the date of transfer to Jinyintan see <a href="https://www.ccdi.gov.cn/lswh/renwu/202002/t20200207">https://www.ccdi.gov.cn/lswh/renwu/202002/t20200207</a> 210984.html

# DRASTIC047

Age&Sex 64M
Chinese name XXX
Name XX X
Type Positive
Wet market No

Onset 2020-01-03

1st Admission Discharged Death Hospital Dec 31st Lineage Li 2.2 Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW

NMDC CNGB

BioProject	-
SRP/CRA	-
SRR/CRR	-
SAM	-
Notes	
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	_
2019-12-05	_
2019-12-06	_
2019-12-07	_
2019-12-08	
2019-12-09	_
	-
2019-12-10	-
2019-12-11	-
2019-12-12	-
2019-12-13	-
2019-12-14	-
2019-12-15	-
2019-12-16	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	_
2019-12-23	_
2019-12-24	_
2019-12-25	_
2019-12-26	_
2019-12-27	_
2019-12-28	_
2019-12-29	-
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2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
2020-01-07	-
2020-01-08	-

2020-01-09 2020-01-10 2020-01-11 2020-01-12 2020-01-13 2020-01-14 2020-01-15 2020-01-16 2020-01-17 2020-01-18 2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check

Linked cases:

#### DRASTIC045

References for the above summary:

Li et al (2020)

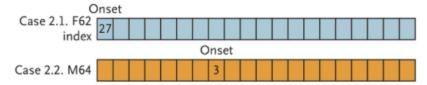
https://www.nejm.org/doi/full/10.1056/nejmoa2001316

Additional information about this case:

Li et al (2020)

https://www.nejm.org/doi/full/10.1056/nejmoa2001316

# Cluster 2 (December 2019-January 2020)



Discussion of this case:

# DRASTIC048 Zhang Shuzhi

Age&Sex 65M1 Chinese name 张树志

Name Zhishu Zhang (sometimes just Zhang Zhi)

Type Positive

Wet market Owner of frozen food business, One article says retired, one 'deliveryman'

Onset 2019-12-13 (<u>or 15th - Caixin</u>)

 1st Admission
 2019-12-18

 Discharged
 2020-02-04

Death Y

Hospital Dec 31st Jinyintan

Lineage B

Cluster

1st 27 JYT 18
2nd 41 JYT 18
CN-WHO S02
ICU JYT WIV -

IPBCAMS-WH-01

```
WH
IME-WH
IVDC
WH190
WHU
Other
                  MT019529
Genbank
                  EPI_ISL_402123
GISAID
GW
                  GWHABKF00000000
NMDC
CNGB
BioProject
                  PRJCA002165
SRP/CRA
SRR/CRR
                  SAMC133241
SAM
Notes
                  First genome
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
2019-12-07
2019-12-08
2019-12-09
2019-12-10
2019-12-11
2019-12-12
2019-12-13
                  Central outpatient clinic
2019-12-14
2019-12-15
2019-12-16
                  Central outpatient clinic
2019-12-17
```

Central

Central

Central

Central

Central

Central

Tongji

Tongji

Tongji

Central - condition worsened - ICU (Caixin)

2019-12-18 2019-12-19

2019-12-20

2019-12-21

2019-12-22

2019-12-23

2019-12-24

2019-12-25

2019-12-26

2019-12-27

HBCDC-HB-

0040 40 00	T!!
2019-12-28 2019-12-29	Tongji
	Tongji - <u>intubated</u>
2019-12-30	Jinyintan
2019-12-31	Jinyintan
2020-01-01	Jinyintan
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	Jinyintan
2020-01-12	Jinyintan
2020-01-13	Jinyintan
2020-01-14	Jinyintan
2020-01-15	Jinyintan
2020-01-16	Jinyintan
2020-01-17	Jinyintan
2020-01-18	Jinyintan
2020-01-19	Jinyintan
2020-01-20	Jinyintan
2020-01-21	Jinyintan
2020-01-22	Jinyintan
2020-01-23	Jinyintan
2020-01-24	Jinyintan
2020-01-25	Jinyintan
2020-01-26	Jinyintan
2020-01-27	Jinyintan
2020-01-28	Jinyintan
2020-01-29	Jinyintan
2020-01-30	Jinyintan - Died (Caijing)
2020-01-31	Jinyintan — Or dead
check	-

# Linked cases:

The Majiang group

# References for the above summary:

### **CN-WHO Report**

From China-WHO report, Chinese part, Table 7 page 72:

Sample ID	Sequence ID	Relation to the Huanan market	Stall	Onset date	Collection date	Mutations (gene name) <sup>a</sup>	Lineage
S02	EPI_ISL_40 2123	Vendor	Seafood	13 Dec	24 Dec	0	L/B

#### Caixin

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html

Caijing

https://archive.md/3hplr

#### https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
18	研口	男65	经营者,冷冻水饺
	Qiaokou	Male	operator, frozen dumplings

#### https://archive.is/3hplr

"Zhang Zhi worked in Wuhan South China Seafood Market in his early years and has now retired. After retirement, he often travels to the seafood market to chat and play mahjong [alt: cards] with acquaintances. On December 13, 2019, Zhang Zhi developed a high fever after catching a cold."

A recount of someone sampling the first covid sample in the lab.

<u>Hospitalization records</u> show that Zhang Zhi was hospitalized on December 18, 2019 and was diagnosed as "community-acquired pneumonia, severe illness" on that day, while other clinical diagnoses were "respiratory failure, diabetes" and so on.

• • • •

On December 13, 19, Zhang Zhi developed a high fever after catching a cold. Although he shivered, he did not have any discomforts such as nasal congestion or runny nose or cough and difficulty breathing. Zhang Zhi went to Wuhan Central Hospital for registration in time, and took antibiotics according to the doctor's

Commented [13]: It says somewhere he had "chills" for two days previous

instructions for five days but **still had a high fever** . His worried wife accompanied Zhang Zhi to the emergency ward.

A single-page Word document titled "<u>Statement of Fever AAA</u>", signed on December 30, 2019, recorded the visits of two patients with pneumonia in Wuhan. As of the information obtained so far, they should be the first batch of patients to be detected with pneumonia from the new coronavirus.

 $\frac{https://web.archive.org/web/20210815212841/http://k.sina.com.cn/article 1648953020 624906bc00100pmjk.html \\ \frac{https://baijiahao.baidu.com/s?id=1661578835766496388&wfr=spider&for=pc}{}$ 

On December 13, 19, Zhang Zhi developed a high fever after catching a cold. 65-year-old Zhang Zhi

The first person to detect the new crown virus, who became ill in December, died 48 days later,

1. Zeng XX, male, 61 years old

2. Xiong XX, male, 69 years old, went to Wuhan Red Cross Hospital for 2 days

https://archive.fo/DjjdP

https://news.sina.com.cn/c/2020-02-17/doc-iimxyqvz3653366.shtml

On December 18, 2019, a 65-year-old male self-employed came to the hospital's Nanjing Road campus to see the emergency department. Five days ago, he developed fever, with a body temperature of 39.1°C. He had chills before the fever, but he had no nasal congestion, runny nose, dyspnea, cough and other symptoms. Previously, on December 16, the man first went to the outpatient clinic of the hospital, and was admitted to the emergency ward after three days of symptomatic treatment such as amoxicillin clavulanate potassium, oseltamivir and lesong tablets. The emergency doctor tried the carbapenem advanced broadspectrum antibiotics for the man, but there was still no sign of improvement, and his lung infection showed that "the lungs are mostly scattered in patchy blurred shadows." On December 22, the man was transferred to the respiratory department of the hospital for treatment. On December 25, he was transferred to Tongji Hospital. After that, he was transferred to Jinyintan Hospital, which specializes in treating infectious patients. In the later tracing process, Ai Fen learned that the man was a deliveryman at the South China Seafood Market.

#### Additional information about this case:

His stall

http://babarlelephant.free-hoster.net/visiting-the-wuhan-seafood-market/?i=1 Many more photos can be found using the link above

Commented [14]: Wrong link. There's another that mentions 48 days though



### His business:

### Name

武汉市江汉区市场监督管理局

### Address

武汉市江汉区华南海鲜市场西区十一街20、22、24号,十二街19、21、23号

### https://aiqicha.baidu.com/company\_detail\_14877861000910

Business name, market address and location confirmed

https://www.11467.com/giye/44270554.htm

# Interview with Frozen Food Magazine

http://ld001.com/show\_8\_172.html archived https://archive.vn/OQCey and https://web.archive.org/web/20211206200138/http://www.ld001.com/show\_8\_172.html

### Original

张树志在武汉市区拥有四家门店,分工各不相同;

白沙洲一号店:门店以辐射湖北地区各地级市农贸市场为主,掌控着武汉地区大部分的二 批商户,其辐射范围甚广,线下渠道甚多,年销售额1.4亿。

白沙洲十号店:门店辐射范围与一号店近同,其主要以酒店食材为主,在湖北地区各地市餐饮渠道所占比重甚高,并与湖北地区知名连锁酒店艳阳天等长期保持稳定的供应合作关系;

汉肉联门店:肉联门店因其地理位置特殊,周边存在大量的居民区与人员聚集区,其门店主要职能以零售为主,且常年保持高客流量,遇重大节假日为其销售高峰期,销量高速增长;

武汉华南门店:昌盛华南门店主以武汉市内餐饮渠道供应为主,其客户资源与质量均属武汉地区餐饮经营者中佼佼者,客源稳定且消化量大,品质高。四大门店支持着昌盛年均翻番的任务承载。

#### Translation

Zhang Shuzhi has four stores in the urban area of Wuhan, with different divisions of labor;

Baishazhou No. 1 Store: The store mainly radiates to the farmers' markets in various cities in Hubei, and controls most of the second batch of merchants in Wuhan. It has a wide range of coverage, many offline channels, and annual sales of 140 million.

Baishazhou No. 10 Store: The radiation range of the store is similar to that of No. 1 Store. It mainly focuses on hotel ingredients. It has a high proportion of catering channels in various cities in Hubei and has maintained long-term stability with well-known chain hotels in Hubei, such as Sunny Sky. Supply partnership;

Han Roulian Store: Due to its special geographical location, there are a large number of residential areas and people gathering areas around the Roulian store. Its main function is retail, and it maintains a high passenger flow throughout the year. It is the peak sales period during major holidays. Rapid sales growth;

Wuhan South China Store: The owner of Changsheng South China Store mainly supplies catering channels in Wuhan. Its customer resources and quality are among the best catering operators in Wuhan, with a stable customer source, large digestion, and high quality. The four gate stores support the task of doubling the prosperity every year.

### More articles about him



Lots of photos within including photos of his other stores in Wuhan

Original: <a href="https://www.meipian.cn/4rwpalh">https://www.meipian.cn/4rwpalh</a>

Archived: <a href="https://archive.vn/9YsvP">https://archive.vn/9YsvP</a>

Also:

Original: https://www.sohu.com/a/283936442 687062

Archived: https://archive.vn/huwfK

See also <a href="https://baijiahao.baidu.com/s?id=1658965494679890909&wfr=spider&for=pc">https://baijiahao.baidu.com/s?id=1658965494679890909&wfr=spider&for=pc</a>
Who was the first patient with new coronary pneumonia detected by genetic testing?

Caijing article:

https://archive.md/3hplr

#### 第一个测出新冠病毒的人,12月发病,治疗48天去世,死前意识清醒

"那时没人想到,这将是一场来势汹汹的新型冠状病毒肺炎疫情。"

1月24日,中日友好医院的副院长曹彬协同科研人员在《柳叶刀》发表了论文,指出我国首例新 冠肺炎患者在2019年12月1日出现相关的症状。

《财经》记者根据此前公开的资料,初步推断出65岁的张志是最早一批被检测出被新冠病毒的肺炎病人之一。

住院记录显示,张志于2019年12月18日住院且当日被诊断为"社区获得性肺炎、重症",而临床的 其他诊断则为"呼吸衰竭、糖尿病"等。

从确诊到离世就短短的48天,这期间张志与他的家人到底经历了什么?

一、治疗无效,高烧不退

据了解,65岁的张志早年在武汉华南海鲜市场工作而如今已退休,退休后常往返海鲜市场与熟人聊天打牌。

在19年12月13日,张志吹风着凉后出现高烧症状,虽会打寒战但却无鼻塞流涕或者咳嗽呼吸困难等不适。张志及时前往武汉市中心医院挂号,而后五天按照医嘱要求服用抗生素药物却仍旧高烧不退,担心的妻子便陪同张志入住急诊病房。

据记录显示,张志住院当日首诊为社区获得性肺炎且标明重症,其他诊断则为呼吸衰竭、糖尿病等,高烧不退的张志随后送往呼吸科监护室,情况越发严重。

#### 二、寻找病原体

服用药物5天后仍然高烧不退,医生顿时提起了心。

一名呼吸科医生给张志做了肺泡纤维支气管镜灌洗取样操作,并并将样本样本送到第三方检测机构进行NGS检测。NGS检测可以对样本进行基因测序,被认为是检测的重要"金标准",其目的是确定张志体内的病原体。

等待检测结果的过程中,张志依旧高烧不退且无法呼吸,妻子王丽将张志送往华中科技大学同济 医学院附属同济医院进行进一步治疗。

按照正常情况,检测结果会在3天后出来,且应当及时反馈到武汉市中心医院。但是事实上,检测机构考虑到其他原因,仅以电话告知医院张志病原体为"冠状病毒",没有出具书面报告。

在此期间,湖北省中西医结合医院呼吸与重症医学科主任张继先先后接诊好几个和张志同症状的 患者,包括高烧不退、抗感染无效以及重症肺炎,排除常见病原体感染后,张继先警觉地将情况 反映给上级疾控中心。

#### 三、张志的最后三天

张志病情持续恶化,由于原先的医院设备不足,直到12月30日才成功将张志送往武汉金银潭医院进行治疗,医生和张志家属解释该病可能会传染,要求他们务必佩戴好口罩。

据张志妻子的回忆,当天有好几个类似的病人陆续被送往金银潭医院。

住进专门收治传染病患者的武汉金银潭医院后,张志未能与妻子再次相见,因为医院怀疑是病毒性肺炎而不允许家属探视。此后张志就与家人断了联系,干等医生电话的妻子除了着急也别无他法。

张志入住金银潭一个月后,王丽接到了医生的电话,说张志正在抢救中。

20分钟后,王丽再次接到医院的电话,此时她被告知张志抢救无效,已经去世了。

无法接受丈夫离世的王丽想去医院见张志最后一面,却被医院拒绝。医院仅通知王丽在某个时间 来领张志的死亡证明,并一再强调该病会传染,不能跟遗体接触。

张志家庭的遭遇,成了扑面而来的肺炎疫情中一个小小的缩影,甚至迅速被后续的疫情消息给淹没。48天过去,留给妻子王丽的只有遗憾不舍和一颗空荡荡的心。

#### 图源:财经

#### 四、新冠肺炎致死有多痛苦?

在2月27日广州医科大学举办疫情防控专场新闻通气会上,国家卫健委高级别专家组组长、中国工程院院士钟南山提及,"新冠肺炎重症有个突出特点:小气道中黏液非常多,粘稠度很高,阻碍气道通畅,因而造成继发感染,以及更加严重化。"清除小气道黏液这个问题,现在还没有解决。

新冠肺炎重症患者的小气道黏液会不断增多,将气道一点点阻塞,容易造成继发感染并加重肺炎症状。此时氧气无法顺利进入肺泡并进行气体交换,就如同溺水时大量的水进入肺部而丧失换气功能,此时肺被病毒导致的果冻状的分泌物给占满了,再浓的氧也进不去血里面。

最终新冠肺炎患者只能不断的挣扎,直到呼出最后一口气。这个过程病人全程清醒,会呼救,会 哭着喊着说医生你救救我,伴随着剧烈地浄扎……

#### 参考资料:

- 1.《25例新冠肺炎死亡患者临床分析:因肺部黏液过多窒息而亡》,澎湃新闻,2020-02-29
- 2.《谁是第一个基因检测出的新冠肺炎患者?》,财经杂志,2020-02-19

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Translation (emphasis ours)

The first person to be tested for the new coronavirus, became ill in December, died within 48 days of treatment, and was conscious before death

"At that time, no one thought that this would be a menacing new coronavirus pneumonia epidemic."

On January 24, Cao Bin, the vice president of the China-Japan Friendship Hospital, and scientific researchers published a paper in The Lancet, pointing out that my country's first patient with new coronary pneumonia developed related symptoms on December 1, 2019.

Based on previously published information, a reporter from Caijing preliminarily inferred that the 65-year-old Zhang Zhi was one of the first patients with pneumonia detected by the new coronavirus.

Hospitalization records show that Zhang Zhi was hospitalized on December 18, 2019 and was diagnosed with "community-acquired pneumonia, severe illness" on that day, while other clinical diagnoses were "respiratory failure, diabetes", etc.

It was only 48 days from diagnosis to death. What did Zhang Zhi and his family experience during this period?

1. The treatment is ineffective and the high fever does not go away

It is understood that the 65-year-old Zhang Zhi worked in the South China Seafood Market in Wuhan in his early years and has now retired. After retirement, he often travels to the seafood market to chat and play mahjong [alt: cards] with acquaintances.

On December 13, 19, Zhang Zhi developed a high fever after catching a cold. Although he would chill, he did not have any discomforts such as nasal congestion, runny nose or cough and difficulty breathing. Zhang Zhi went to Wuhan Central Hospital for registration in time, and took antibiotics as prescribed by the doctor but still had a high fever five days later. His worried wife accompanied Zhang Zhi to the emergency ward.

According to records, Zhang Zhi was first diagnosed with community-acquired pneumonia on the day he was hospitalized and marked as severe. Other diagnoses were respiratory failure and diabetes. Zhang Zhi, who had a high fever, was sent to the respiratory intensive care unit and his condition became more serious.

Second, look for pathogens

After taking the medicine for 5 days, the fever still persists, and the doctor suddenly raised his heart.

A respiratory doctor performed an alveolar fiber bronchoscopy lavage sampling operation for Zhang Zhi, and sent the samples to a third-party testing agency for NGS testing. NGS testing can perform genetic sequencing on samples and is considered an important "gold standard" for testing. Its purpose is to determine the pathogen in Zhang Zhi's body.

While waiting for the test results, Zhang Zhi still had a high fever and was unable to breathe. His wife Wang Li sent Zhang Zhi to Tongji Hospital Affiliated to Tongji Medical College of Huazhong University of Science and Technology for further treatment.

According to normal circumstances, the test results will come out in 3 days and should be reported back to Wuhan Central Hospital in time. But in fact, considering other reasons, the testing agency only informed the hospital that Zhang Zhi's pathogen was a "coronavirus" by phone, and **did not issue a written report.** 

During this period, Zhang Jixian, director of the Department of Respiratory and Critical Care Medicine of Hubei Provincial Hospital of Integrated Traditional Chinese and Western Medicine, successively received several patients with symptoms of Zhang Zhi, including high fever, ineffective anti-infection, and severe pneumonia. After excluding common pathogen infections, Zhang Jixian vigilantly The situation is reported to the higher-level CDC.

Three, Zhang Zhi's last three days

Zhang Zhi's condition continued to deteriorate. Due to the lack of equipment in the original hospital, Zhang Zhi was not successfully sent to Wuhan Jinyintan Hospital for treatment until December 30. The doctor and Zhang Zhi's family explained that the disease may be contagious and asked them to wear masks.

According to Zhang Zhi's wife, several similar patients were sent to Jinyintan Hospital one after another that day.

After being admitted to Wuhan Jinyintan Hospital, which specializes in treating patients with infectious diseases, Zhang Zhi failed to meet his wife again because the hospital suspected viral pneumonia and did not allow family visits. After that, Zhang Zhi broke contact with his family, and his wife who was waiting for the doctor's call had no choice but to be anxious.

One month after Zhang Zhi stayed in Jinyintan, Wang Li received a call from the doctor, saying that Zhang Zhi was being rescued.

Twenty minutes later, Wang Li received a call from the hospital again. At this time, she was told that Zhang Zhi's rescue was ineffective and had passed away.

Unable to accept the death of her husband, Wang Li wanted to go to the hospital to see Zhang Zhi for the last time, but was rejected by the hospital. The hospital only notified Wang Li to receive Zhang Zhi's death certificate at a certain time, and repeatedly emphasized that the disease is contagious and should not be in contact with the body.

The experience of Zhang Zhi's family became a small epitome of the pneumonia epidemic, and was even quickly overwhelmed by subsequent news of the epidemic. After 48 days, only regrets and an empty heart are left to his wife Wang Li.

Source: Finance

4. How painful is the death caused by new coronary pneumonia?

At the special press conference on epidemic prevention and control held by Guangzhou Medical University on February 27, Zhong Nanshan, leader of the high-level expert group of the National Health Commission and academician of the Chinese Academy of Engineering, mentioned, "The severe disease of new coronary pneumonia has a prominent feature: there is a lot of mucus in the small airways. , The viscosity is very high, which hinders the smooth flow of the airway, thus causing secondary infection and more serious. "The problem of clearing small airway mucus has not been solved yet.

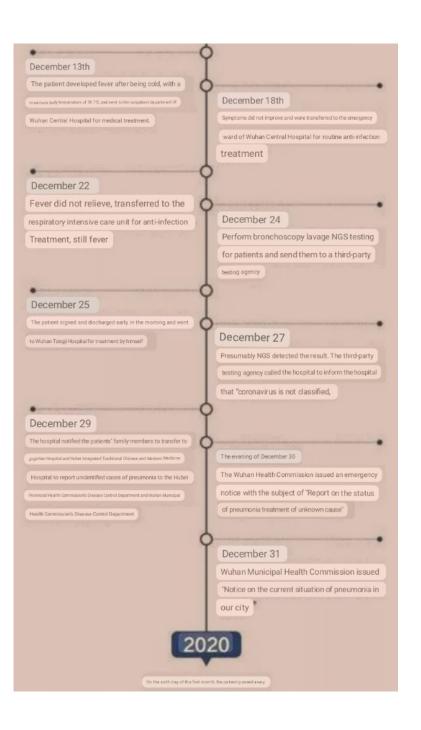
The small airway mucus of severely ill patients with new coronary pneumonia will continue to increase, which will block the airway a little bit, which is likely to cause secondary infection and aggravate the symptoms of pneumonia. At this time, oxygen cannot smoothly enter the alveoli and exchange gas, just like when a large amount of water enters the lungs when drowning, and loses the ventilation function. At this time, the lungs are filled with the jelly-like secretions caused by the virus. Can't get into the blood.

In the end, patients with new coronary pneumonia can only continue to struggle until they exhale their last breath. During this process, the patient is fully awake and will call for help, crying and crying that the doctor will help me, accompanied by violent puffing...

Reference materials:

- 1. "Clinical analysis of 25 patients who died from new coronary pneumonia: died of asphyxiation due to excessive mucus in the lungs", The Paper, 2020-02-29
- 2. "Who is the first patient with new coronary pneumonia detected by genetic testing? ", Financial Magazine, 2020-02-19

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#### Conversion of Death date

Death date given in infographic as the 'first day of the first lunar month' (正月初六,患者去世). Using an online converter:

English Date: January 30, 2020

Chinese Date: Ding-Chou(Ox) (1st month), 6, 4718

Chinese Year Name: Geng Zi(Rat)

This would be 48 days from onset.

Caixin article

Discusses him but focus is on his sample

Caixin says he is working deliveryman with Dec 15 onset but less detailed than qq (actually Health Web) link above so probably error

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html

Selected Text Chinese Original

独家|新冠病毒基因测序溯源:警报是何时拉响的

[...]

首例12月27日即出结果

2019年12月15日,一名65岁的华南海鲜市场男性送货员开始发烧。12月18日,他来到武汉市中心医院本院(南京路院区)急诊科看病,医生怀疑可能是社区获得性肺炎,将其收治入该院急诊科病房。社区获得性肺炎是一类由细菌、病毒、衣原体和支原体等多种微生物所引起的肺炎的泛称,主要临床症状有咳嗽、伴或不伴咳痰和胸疼。

12月22日,这位病人病情加重,进入ICU,医生们使用了各种抗生素治疗无效。武汉市中心 医院呼吸内科主任医师赵苏教授告诉财新记者,12月24日,呼吸内科一名副主任医师对这位病人 进行了气管镜采样,然后将病人的肺泡灌洗液样本送到第三方检测机构广州微远基因科技有限公司进行NGS检测,希望利用其基于宏基因组学的二代高通量基因测序技术(mNGS),找出病原体。肺泡灌洗是一种清除肺泡内炎性分泌物等、改善呼吸功能的治疗方法,对下呼吸道和肺部疾病来说,肺泡灌洗液中的病原体含量高于咽拭子。

微远基因全称广州微远基因科技有限公司,成立于2018年6月。其招聘广告称专注于肿瘤学和感染病原学精准医疗,拥有基于二代高通量测序技术的测序平台(NGS)。

"自华大基因利用测序技术起家以来,国内大大小小出现了好多家基因测序公司,这些年我们各类医学研讨会上,二代高通量基因测序技术不断被介绍,这些公司也派出医药代表到各大医院宣讲。"赵苏对财新记者说。华大基因(300676.SZ)全称为深圳华大基因股份有限公司,原名北京华大基因研究中心,成立于1999年,先后完成了国际人类基因组计划中国部分、水稻和大熊猫基因组计划等多项具有国际先进水平的基因组研究工作。2017年7月以"基因测序第一股"登陆创业板,是全球最大的基因组学研发机构。

另一位武汉协和医院的医生也介绍,"测一次,600万个碱基序列,3000元,这3000元能查出来病原体究竟是什么病毒或者细菌,就可能救命。"

一般来说,基因测序公司应当在三天后,也就是12月27日反馈检测结果,但微远基因并没有给出书面报告。"他们只是电话通知我们,说是一种新的冠状病毒。"赵苏说。此时这名病人已经于12月25日转入武汉同济医院。

2020年2月21日,这个病例的基因检测信息,被微信公号"微远基因"的一篇文章披露出来。 该篇公号文章写道,中华医学杂志(英文版)于1月27日发表论文,介绍新型冠状病毒发现始末 ,微远基因参与了新型冠状病毒早期发现工作。

[...]

Selected text English Translation (our emphasis)

Exclusive|Traceability of New Coronavirus Gene Sequencing: When did the alarm sound?

Results of the first case will be available on December 27

On December 15, 2019, a 65-year-old male deliveryman at the South China Seafood Market began to have a fever. On December 18, he came to the emergency department of Wuhan Central Hospital (Nanjing Road District) to see a doctor. The doctor suspected that it might be community-acquired pneumonia and admitted him to the emergency ward of the hospital. Community-acquired pneumonia is a general term for pneumonia caused by bacteria, viruses, chlamydia and mycoplasma. The main clinical symptoms are cough, with or without sputum and chest pain.

On December 22, the patient's condition worsened and entered the ICU. The doctors used various antibiotics to treat it to no avail. Professor Zhao Su, chief physician of the Department of Respiratory Medicine of Wuhan Central Hospital, told Caixin reporters that on December 24, a deputy chief physician of the Department of Respiratory Medicine performed a bronchoscopy sample on the patient, and then sent the patient's alveolar lavage fluid sample to the No. Tripartite testing agency Guangzhou Weiyuan Gene Technology Co., Ltd. conducts NGS testing, hoping to use its metagenomics-based second-generation high-throughput gene sequencing technology (mNGS) to identify pathogens. Alveolar lavage is a treatment method to remove inflammatory secretions in the alveoli and improve respiratory function. For lower respiratory tract and lung diseases, the content of pathogens in alveolar lavage fluid is higher than that in throat swabs.

Weiyuan Gene's full name is Guangzhou Weiyuan Gene Technology Co., Ltd., which was established in June 2018. Its job advertisement stated that it focuses on precision medicine in oncology and infectious pathogens, and has a sequencing platform (NGS) based on the second-generation high-throughput sequencing technology.

"Since BGI started using sequencing technology, many gene sequencing companies have emerged in China, large and small, and in our various medical seminars in recent years, the second-generation high-throughput gene sequencing technology has been continuously introduced, and these companies have also sent medicines. Representatives went to major hospitals to preach." Zhao Su told Caixin reporters. Huada Gene ( 300676.SZ ) is called Shenzhen Huada Gene Co., Ltd., formerly known as Beijing Huada Gene Research Center. It was established in 1999 and has successively completed the Chinese part of the International Human Genome Project, the rice and giant panda genome projects, etc. Genome research work with international advanced level. In July 2017, it was listed on the GEM as the "first share of gene sequencing", and it is the world's largest genomics research and development institution.

Another doctor from Wuhan Union Medical College Hospital also introduced, "One test, 6 million base sequences, 3,000 yuan, this 3,000 yuan can find out what virus or bacteria the pathogen is, and it may save lives."

Generally speaking, the gene sequencing company should feedback the test results three days later, that is, on December 27, but Weiyuan Gene did not give a written report. "They just called us to inform us that it was a new coronavirus." Zhao Su said. At this time, the patient was transferred to Wuhan Tongji Hospital on December 25.

On February 21, 2020, the genetic testing information of this case was disclosed by an article on the WeChat public account "Weiyuan Gene". The official article wrote that the Chinese Medical Journal (English version) published a paper on January 27, introducing the whole story of the discovery of the new coronavirus. Weiyuan Gene participated in the early detection of the new coronavirus.

[...article continues]

[Oral Record] Zhang Dingyu: I am in the eye of the storm | Wuhan (director of Jinyintan)

https://www.weibo.com/ttarticle/p/show?id=2309404483446197059980

Mentions having obtained the Coronavirus sequencing result on Dec 27 from Tongji, then obtazined the sequence (from Weiyuan gene) then sent it to the WIV who replied that it is indeed a SARS-like coronavirus.

Little dog post

See First sequencing, Little dog post

More from Francisco to figure out

Francisco

5:24 AM Sep 4

Sohu 200320: "Due to the lack of equipment in the original hospital, Zhang Zhi was not successfully sent to Wuhan Jinyintan Hospital for treatment until December 30"

### Discussion of this case:

There is some confusion between what we initially believed to be a pseudonym 'Zhang Zhi' (张志) vs Zhang Shuzhi (张树志), as well as mention of him as a deliveryman by Caixin and some discrepancies about onset. Given the general low quality of all the data surrounding early cases and the strong similarities we think these differences are not great enough to split this into two separate early cases and that these references are all very likely to the same person.

#### We need to discuss the reference to a deliveryman and discrepancy of onset

Zhang Shuzhi worked in the market "in his early years" 早年在 but was "retired". He apparently started with a stall at Huanan and later expanded to own 3 other units elsewhere. His business employed ~100 and sold more of a regional frozen noodle company's 千味央厨全 (60 million yuan sales) product than any other so they honored him at their conference, hence the meipian pics. Recently he became a co-invester with 4 others in a frozen storage business 武汉益联安诚供应链管理合伙企业(有限合伙) with 9 million yuan capital

So he was wealthy but not a big time executive. Like someone who owns a couple McDonalds franchises. He hadn't tended his old stall at Huanan for a long time probably but liked to visit the market [to play mahjong] where people he'd known for years worked and he might have lived nearby. Caixin's "deliveryman" description conflicts with other evidence but the article got his onset wrong and has far less detail than the other source

- Brian

Francisco's spreadsheet comments:

Francisco

5:24 AM Sep 4

Patient (and relatives) did not want to get transferred to Jinyintan

Francisco

# DRASTIC049

Age&Sex 65M2
Chinese name XXX
Name XX X
Type Positive

Wet market owner of a private clinic near the market

Onset

1st Admission 2020-01-01

Discharged - Death -

Hospital Dec 31st Red Cross

Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB- $\mathsf{WH}$ IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW **NMDC CNGB** 

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BioProject
SRP/CRA
SRR/CRR
SAM
Notes
                   owner of a private clinic near the market
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
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2019-12-08
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2019-12-10
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2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
2019-12-28
2019-12-29
2019-12-30
                   Red Cross
2019-12-31
2020-01-01
                   Central (Houhu)
2020-01-02
2020-01-03
2020-01-04
2020-01-05
2020-01-06
2020-01-07
2020-01-08
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2020-01-09 2020-01-10 2020-01-11 2020-01-12 2020-01-13 2020-01-14 2020-01-15 2020-01-16 2020-01-17 2020-01-18 2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check

#### Linked cases:

Potentially shrimp seller Wei <u>DRASTIC040</u> who visited a small clinic near the market several times – tenuous connection as there are many clinics

See section The Clinic — is it that clinic?

### References for the above summary:

 $\frac{http://web.archive.org/web/20200326145819/https://mp.weixin.qq.com/s/1zNY2YXy75snzwX3Tg09Cq}{}$ 

In the early morning of January 1, the emergency department of Houhu Hospital received another 65-year-old man who was transferred from Wuhan Red Cross Hospital. The man opened a clinic near the Huanan Seafood Market and recently treated many patients with fever. Later, he also developed symptoms and became seriously ill. Affin analyzed that the disease of the clinic owner was probably transmitted to him by the patients of his clinic.

Selected quotes from WSJ, China's early coronavirus missteps

https://archive.md/9a5jm

Early in the morning on Jan. 1, another patient arrived at Dr. Ai's department from the Red Cross Hospital, where Ms. Wei was briefly treated nearly three weeks earlier. The owner of a private clinic near the market had become seriously sick after treating several patients suffering from fever.

Ai fen - whistle blower

https://archive.ph/OLdHs

Among the first seven people, there is a disease caused by a mother delivering meals to her son. The boss of a clinic gets sick, and it is also passed on to him by a patient who comes for injections, which is very serious.

Additional information about this case:

Discussion of this case:

## DRASTIC050

 Age&Sex
 66M

 Chinese name
 罗

 Name
 Luo

 Type
 Positive

Wet market

Onset 2019-12-22 1st Admission 2019-12-31 Commented [15]: Contains quotes from doctor about family cluster

Commented [16]: is everyone on NHC list confirmed positive

Discharged 2020-01-21
Death Y
Hospital Dec 31st Central
Lineage Cluster 1st 27 JYT 2nd 41 JYT 28

CN-WHO **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW **NMDC CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14

2019-12-15 2019-12-16 Commented [17]: what is this, what list is it referring to

Commented [18]: Francisco's own id, trying to guess the 41 patients in Huang et al

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2019-12-17
2019-12-18
2019-12-19
2019-12-20
2019-12-21
2019-12-22
2019-12-23
2019-12-24
2019-12-25
2019-12-26
2019-12-27
2019-12-28
2019-12-29
2019-12-30
                    Central
2019-12-31
2020-01-01
                    Central
                    Jinyintan
2020-01-02
                    Jinyintan
2020-01-03
2020-01-04
                    Jinyintan
2020-01-05
                    Jinyintan
2020-01-06
                    Jinyintan
2020-01-07
                    Jinyintan
2020-01-08
                    Jinyintan
                    Jinyintan
2020-01-09
                    Jinyintan
2020-01-10
                    Jinyintan
2020-01-11
                    Jinyintan - Ventilation
2020-01-12
2020-01-13
                    Jinyintan
2020-01-14
                    Jinyintan
2020-01-15
                    Jinyintan
2020-01-16
                    Jinyintan
2020-01-17
                    Jinyintan
                    Jinyintan
2020-01-18
                    Jinyintan
2020-01-19
                    Jinyintan
2020-01-20
2020-01-21
                    Jinyintan - Died.
2020-01-22
2020-01-23
2020-01-24
2020-01-25
2020-01-26
2020-01-27
2020-01-28
2020-01-29
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2020-01-30 -2020-01-31 check -

#### Linked cases:

### References for the above summary:

NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

九、罗XX,男,66岁,2019年12月22日无诱因咳嗽,以干咳为主,无发热;12月31日出现胸闷,气短,活动后明显,至市中心医院就诊;2020年1月2日转入金银潭医院,影像学双肺病变弥漫,呈"白肺样"改变。入院后给予经鼻高流量给氧等对症治疗,顽固性低氧血症难以纠正。1月12日10时行气管插管呼吸机辅助呼吸,镇静状态,体温36.7℃,呼吸窘迫,继续积极抗菌治疗。当日患者氧合改善不明显,呼吸机吸入氧浓度已下调至50%左右,动脉血氧分压80mmHg。患者病程长,免疫功能极差,存在脓毒性休克风险,1月21日9时50分抢救无效死亡。

#### Translation

9. Luo XX, male, 66 years old, on December 22, 2019, cough without cause, mainly dry cough, no fever; chest tightness, shortness of breath, obvious after activities on December 31, go to the central hospital for treatment; January 2020 He was transferred to Jinyintan Hospital on the 2nd, and the imaging lesions of both lungs were diffuse, showing "white lung-like" changes. After admission, he was given symptomatic treatment such as high-flow oxygen through the nose, and refractory hypoxemia was difficult to correct. At 10 o'clock on January 12, he was assisted by breathing with a tracheal intubation ventilator. He was sedated, his body temperature was 36.7°C, and he was suffering from respiratory distress. He continued active antibacterial treatment. On that day, the patient's oxygenation did not improve significantly, the ventilator inhaled oxygen concentration had

been reduced to about 50%, and the arterial blood oxygen partial pressure was 80mmHg. The patient had a long course of illness, extremely poor immune function, and risk of septic shock. He died at 9:50 on January 21.

### Additional information about this case:

### Discussion of this case:

Possibly the same patient as 65M2 mentioned in the Ai Fen stories (in contrary to 66M) and who was admitted to central hospital (Houhu district) on Jan 1, transferred from Red cross.

# DRASTIC051

Age&Sex 67M Chinese name 李顺

Name Li Shun (pseudo) Type Suspected

Wet market No

Onset 2019-12-20 1st Admission 2019-12-24 Discharged 2020-01-07

Death Y
Hospital Dec 31st Union
Lineage -

Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW **NMDC** CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20

2019-12-21	_
2019-12-22	_
2019-12-23	_
2019-12-24	Union
2019-12-25	Union
2019-12-26	Union
2019-12-27	Union
2019-12-28	Union
2019-12-29	Union
2019-12-30	Union
2019-12-31	Union
2020-01-01	Union
2020-01-01	Union
	Union
2020-01-03	
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	_
2020-01-30	-
2020-01-31	-
-11	

check

#### Linked cases:

Francisco's reference sheet says clusters yes

### References for the above summary:

Sina 23-Jan-20

Patients with Wuhan pneumonia: unpredictable infections and undiagnosed infections <a href="https://news.sina.cn/gn/2020-01-23/detail-iihnzhha4367863.d.html">https://news.sina.cn/gn/2020-01-23/detail-iihnzhha4367863.d.html</a>
<a href="https://web.archive.org/web/20210825205140/https://news.sina.cn/gn/2020-01-23/detail-iihnzhha4367863.d.html">https://web.archive.org/web/20210825205140/https://news.sina.cn/gn/2020-01-23/detail-iihnzhha4367863.d.html</a>

李顺 Li Shun, 67, admitted into Union Hospital on Dec 24, 2019 certified dead at Jinyintan on Jan 7, 2020

#### https://new.gq.com/rain/a/TWF202002180079595B

Wang Zhuangzhuang, 67, is an ordinary retired worker whose family has a genetic heart disease. It was only 14 days from hospitalization with suspected cold to death from "severe pneumonia". He was the first patient to die in the outbreak, but he was not a confirmed case and did not appear on the death list published by the government, and the death certificate read "severe pneumonia." Since December 23, 2019, Wang Zhuangzhuang has been treated in Wuhan Union Medical College Cancer Hospital, Union Medical College Hospital, and Jinyintan Hospital, but finally died in Jinyintan Hospital on January 7, 2020. After the patient's death, the hospital asked the family to donate the body for medical autopsy, but the body was cremated on the same day after the family refused. Doctors told the family that Wang Zhuangzhuang was the first death in the epidemic.

#### https://www.aboluowang.com/2020/0209/1407175.html

Wang Zhuangzhuang, 67, is an ordinary retired worker. His family has a genetic heart disease and has nothing to do with the Huanan Seafood Market in Wuhan. It was only 14 days from hospitalization with suspected cold to death from "severe pneumonia".

Since December 23, 2019, Wang Zhuangzhuang has been treated in Wuhan Union Medical College Cancer Hospital, Union Medical College Hospital, and Jinyintan Hospital, but finally died in Jinyintan Hospital on January 7, 2020. After the patient's death, the hospital asked the family to donate the body for medical autopsy, but the body was cremated on the same day after the family refused.

"Our family does have a genetic disease of the heart." Wang Lan, Wang Zhuangzhuang's sister, told China Philanthropist, but she did not share this information with the doctor.

Doctors told the family that Wang Zhuangzhuang was the first death in the epidemic.

#### family members infected

From January 1 to Xiehe Hospital, to January 3, Wang Lan accompanied her brother to see a doctor in the hospital, and she hardly slept for three days. On January 4, the exhausted Wang Lan felt exhausted. She came to Wuhan Army General Hospital for medical treatment with a temperature of 37.3 degrees. According to the request of the hospital, Wang Lan took a lung CT, and the results showed that both lungs were infected. She was then isolated for treatment. On the death certificate, Wang Zhuangzhuang's direct cause of death was "severe pneumonia"

#### https://archive.ph/Q5u28

"Wang Zhuangzhuang, 67, is an ordinary retired worker. His family has a genetic heart disease and has nothing to do with the Huanan Seafood Market in Wuhan. It was only 14 days from hospitalization with suspected cold to death from "severe pneumonia".

Since December 23, 2019, Wang Zhuangzhuang has been treated in Wuhan Union Medical College Cancer Hospital, Union Medical College Hospital, and Jinyintan Hospital, but finally died in Jinyintan Hospital on January 7, 2020. After the patient's death, the hospital asked the family to donate the body for medical autopsy, but the body was cremated on the same day after the family refused. Doctors told the family that Wang Zhuangzhuang was the first death in the epidemic."

Additional information about this case:

Discussion of this case:

See also 44M2 another suspected death from Union hospital with similar dates.

# DRASTIC052 Zheng

Wet market Buyer for hotel
Onset 2019-12-12
1st Admission 2019-12-23

Discharged - Death -

Hospital Dec 31st Jinyintan Lineage Cluster 1st 27 JYT 20 2nd 41 JYT 20 **CN-WHO** ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09

2019-12-11 -2019-12-12 Clinic 2019-12-13 Clinic

2019-12-10

2019-12-14	Clinic
2019-12-15	YouFu
2019-12-16	YouFu
2019-12-17	Red Cross
2019-12-17	Red Cross
2019-12-19	Red Cross
2019-12-20	Red Cross
2019-12-21	Red Cross
2019-12-22	Red Cross
2019-12-23	Red Cross
2019-12-24	Tongji
2019-12-25	Tongji
2019-12-26	Tongji
2019-12-27	Tongji
2019-12-28	Tongji
2019-12-29	Tongji
2019-12-30	Tongji
2019-12-31	Jinyintan
2020-01-01	Jinyintan
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
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2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-

2020-01-26

2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

#### Linked cases:

Connected to <a href="DRASTIC032">DRASTIC032</a> 51M Via Hotel (Hotel name here)

Connected to <u>DRASTIC029</u> <u>DRASTIC027</u> <u>DRASTIC055</u> <u>DRASTIC030</u> via the Hotel(? Or market)

Shrimp seller Wei Guixian <u>DRASTIC040</u> also said <u>when interviewed</u> that she sells mostly to Hotels (full transcript)

### References for the above summary:

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
20	研口 Qiaokou	男69 Male	采购批发者,海鲜鲍鱼 龙虾 Purchasing wholesaler, seafood, abalone, lobster

https://www.ulabmed.com/content-270-11941-1.html

#### Additional information about this case:

### https://new.qq.com/omn/20200103/20200103A00QPZ00.html?pc

A family member of a patient who lives near the Huanan Seafood Wholesale Market told the Southern Weekend reporter that her husband, who is 69 years old this year, has been taking goods from the Huanan Seafood Market for 15 years, and he "procures" for the Cantonese food help company in Jingzhou, Hubei. On December 12, 2019, the husband began to have a fever. He went to Tongji Hospital for treatment more than a week later and was initially diagnosed with pneumonia.

"When I arrived in Tongji, I came down and didn't burn anymore." According to the family of the patient, they thought that they could be discharged from the hospital on the 28th without any problems, but unexpectedly, on the evening of December 29th, the husband was transferred to the isolation ward of Jinyintan Hospital.

(Dec 29 transfer, mismatch)

https://news.sina.cn/2020-01-02/detail-iihnzhfz9888024.d.html https://archive.ph/OLXR3 good archived version https://archive.ph/wip/OvJPa

On the afternoon of January 2, 2020, Mr. Zheng, a 69-year-old patient currently undergoing treatment, told Jiem News by phone that he was originally treated at Tongji Hospital (hereinafter referred to as "Tongji Hospital") affiliated to Tongji Medical College of Huazhong University of Science and Technology. I was suddenly transferred to Jinyintan Hospital after a review last Friday."

Mr. Zheng's ward had three patients, two of whom were merchants in the South China Seafood Wholesale Market. The patients here do not receive much treatment in the conventional sense, but doctors will come to the ward to take their temperature every day, and the patients are not allowed to contact the outside world.

According to Mr. Zheng's wife's description, his family lives in a community near the South China Seafood Wholesale Market. Because they are responsible for the procurement of a hotel in Jingzhou, they often contact the South China Seafood Wholesale Market.

On December 12, Mr. Zheng started to have a fever. He went to a hospital in Wuhan and was diagnosed with a lung infection. Later, he went to Tongji Hospital and was hospitalized. After treatment, the fever subsided. Rice. It hasn't been burned for a week now."

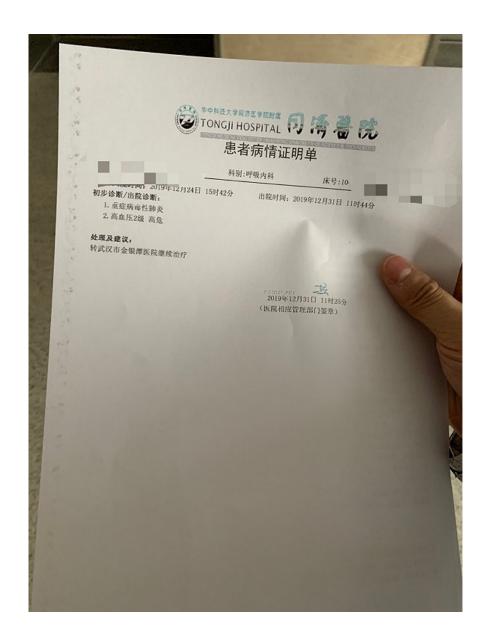
The discharge record issued by Tongji Hospital shows that "the patient was admitted to the hospital due to repeated chills and fever for 11 days'... Considering the possibility of viral infection (adenovirus), and not excluding the possibility of organizing pneumonia, it is recommended to review after clinical treatment." Conclusion of discharge diagnosis For "severe viral pneumonia", it is recommended to transfer to Wuhan Jinyintan Hospital to continue treatment. On December 29, 2019, Mr. Zheng was transferred to Jinyintan Hospital.

Ms. Huang, the patient's family member, told Jiemian News that her husband was 40 years old this year and was also doing hotel purchases. He had a fever for a week last month and had not eaten during that time. At first, he was treated in a small hospital nearby. Later he was transferred to Tongji Hospital. After a blood test, he was diagnosed with pneumonia. "The doctors at Tongji Hospital asked in detail, and the CDC was also involved."

Subsequently, the patient was hospitalized in Tongji Hospital for two days. "The doctor said that there was no special medicine, and we were also in a hurry." Ms. Huang said that on January 1, the doctor in the Respiratory Department of Tongji Hospital indicated that he would like to focus on treatment. Subsequently, the patient was transferred to Jinyintan Hospital. , "Fever was 40 degrees when it came."

"I lived with him and didn't ask me to check it. It shows that this is not contagious, which is also a good thing." Ms. Huang said that Jinyintan Hospital has prepared isolation wards for patients with pneumonia, and each ward can accommodate five to six people. Here, patients are allowed to carry mobile phones, but they cannot contact the outside world.

Prior to this, the Wuhan Municipal Health Commission had notified that among the cases of pneumonia of unknown origin found this time, no obvious person-to-person transmission has been found in the investigation so far, and no medical staff infection has been found. At present, the detection of the pathogen and the investigation of the cause of infection are underway.



#### Ulabmed

https://www.ulabmed.com/content-270-11941-1.html

Archived https://web.archive.org/web/20210822161620/https://www.ulabmed.com/content-270-11941-1.html

Another family member of a patient surnamed Zheng told reporters that her husband is 69 years old this year and is also a picker **for the hotel**. He went to the South China Seafood Market to purchase the goods and then sent them to Jingzhou, probably every day to pick up the goods. "Purchase seafood from a hotel in Jingzhou that specializes in seafood. There is a special car in Jingzhou. After the purchase, they will be transported there."

According to him, her husband first developed a fever on December 12, 2019, and began to think that he had a cold, so he infused in a small clinic However, the fever did not go away after repeated recurrence of fever. Later, I was transferred to Wuhan Youfu Hospital for infusion and blood test. The indicators were a little high. It is recommended that we transfer to Wuhan Red Cross Hospital (Wuhan 11th Hospital) and stayed in the hospital for seven days. The fever could not go away, dizziness and lack of energy. Later, I was transferred to the Department of Respiratory Medicine of Tongji Hospital. I only had a fever and did not cough.

The patient's condition certificate issued by Tongji Hospital shows that the patient surnamed Zheng was admitted to the hospital at about 15:00 on December 24, 2019, and discharged at 11 a.m. on December 31, 2019. "The initial diagnosis is severe viral Pneumonia, high blood pressure level 2, high risk".

"The patient was admitted to the hospital due to repeated chills and fever for 11 days. The possibility of viral infection (adenovirus) is considered, and the possibility of external organizing pneumonia is not ruled out. It is recommended to review after clinical treatment." Tongji Hospital diagnosed. According to the family of the patient surnamed Zheng, after treatment, he has no obvious symptoms of fever. He was about to be discharged from the hospital, but was transferred to Jinyintan Hospital and is currently living on the fourth floor of the hospital.

Wuhan's anti-epidemic test on the 27th: recalling those precious opportunities that were delayed <a href="https://baijiahao.baidu.com/s?id=1656851535613888092&wfr=spider&for=pc">https://baijiahao.baidu.com/s?id=1656851535613888092&wfr=spider&for=pc</a>

According to the family members of the patient surnamed Zheng, her husband is 69 years old this year. He often goes to the Huanan Seafood Market to purchase goods and then sends them to Jingzhou. He has to go to pick up the goods every day. He first started to have a fever on December 12, 2019, and was checked by Tongji Hospital. "Preliminary diagnosis of severe viral pneumonia" was transferred to Wuhan Jinyintan Hospital for intensive treatment on December 31, 2019.

#### Discussion of this case:

Some contradictions between sources regarding exact dates but similarities are overwhelming

He is the first case in the Red Cross hospital stories

#### https://new.qq.com/omn/20200313/20200313A0HB6C00.html

Every autumn and winter, Fan Zhongjie would come into contact with flu patients from the Huanan Seafood Market, but he did not expect that the Red Cross Hospital had entered into such a long "war" since he admitted the wholesaler on December 17 last year. He remembered that the patient had fever, cough, chest tightness, and ground-glass opacities in the lungs on CT examination. He was treated in the hospital for about 10 days, and was first transferred to Tongji Hospital, and then to Jinyintan Hospital.

#### Zheng of the lobster story

May he be the Zheng of the lobster story, who buys for hotels and for distributing aquatic products into the market?

http://moment.rednet.cn/pc/content/2021/09/17/10172606.html

The stall is 10th, 16 18 <a href="https://aiqicha.baidu.com/company">https://aiqicha.baidu.com/company</a> detail 16140882945763 Zheng Wenqing,

Wholesale and retail of fresh and live aquatic products In Brian's map the co-owner is Huang Zhuanxin.

The main problem is that nowhere this stall is indicated as including patients. And 69M1 is said to be buying for hotels.

# **DRASTIC053 Xiong**

 Age&Sex
 69M2

 Chinese name
 熊

 Name
 Xiong

Type Positive
Wet market Yes
Onset 2019-12-31
1st Admission 2020-01-03

Discharged 2020-01-15 (died)

Death Y
Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT 28
CN-WHO ICU JYT WIV IPBCAMS-WHHBCDC-HBWH -

 IME-WH

 IVDC

 WH190

 WHU

 Other

 Genbank

 GISAID

 GW

 NMDC

 CNGB

 BioProject

 SRP/CRA

SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 -

SRR/CRR

2019-12-08

2019-12-09 -2019-12-10 -2019-12-11 -

2019-12-11

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2019-12-30
2019-12-31
2020-01-01
2020-01-02
2020-01-03
                    Red Cross
2020-01-04
                    Jinyintan
                    Jinyintan
2020-01-05
                    Jinyintan
2020-01-06
                    Jinyintan
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2020-01-19
2020-01-20
2020-01-21
2020-01-22
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2020-01-25
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2020-01-26 2020-01-27 2020-01-28 2020-01-30 2020-01-31 check -

#### Linked cases:

### References for the above summary:

NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

二、熊XX,男,69岁,因发热、咳嗽4天,加重伴呼吸困难2天就诊于武汉市红十字会医院,2020年1月3日经口气管插管接呼吸机辅助呼吸,心肌酶谱持续异常。1月4日转入金银潭医院。入院诊断为急性呼吸窘迫综合征、呼吸衰竭、重症肺炎、昏迷待查、胸腔积液、主动脉粥样硬化。患者胸部CT示:双肺大片磨玻璃样影。心电图示:ST段改变。入院后予重症监护、呼吸机辅助呼吸、俯卧位通气治疗,予CRRT、抗感染、护肝等对症及支持治疗,病情无好转,脓毒性休克、微循环衰竭、凝血功能障碍及内环境紊乱进行性加重。1月15日00:15患者心率下降为0,持续去甲肾上腺素、肾上腺素、垂体后叶素、多巴胺等静脉泵入抗休克治疗,患者始终未能恢复自主呼吸及心跳,至0时45分床边心电图示全心停搏,宣告临床死亡。

Translation

2. Xiong XX, male, 69 years old, went to Wuhan Red Cross Hospital for 2 days due to fever and cough for 4 days, aggravated with dyspnea. On January 3, 2020, he received a ventilator assisted breathing via an oral tracheal intubation, myocardium The zymogram continues to be abnormal. He was transferred to Jinyintan Hospital on January 4. The admission diagnosis was acute respiratory distress syndrome, respiratory failure, severe pneumonia, coma for investigation, pleural effusion, and aortic atherosclerosis. CT of the patient's chest showed large ground-glass shadows in both lungs. ECG diagram: ST segment changes. After admission, he was given intensive care, ventilator-assisted breathing, prone position ventilation treatment, CRRT, anti-infection, liver protection and other symptomatic and supportive treatments, no improvement, septic shock, microcirculation failure, coagulation dysfunction, and internal environment disorders Sexual aggravation. At 00:15 on January 15th, the patient's heart rate dropped to 0 and continued intravenous pumping of norepinephrine, epinephrine, pituitrin, dopamine and other anti-shock treatments. The patient failed to recover spontaneous breathing and heartbeat until 0:45. The electrocardiogram at the bedside showed total cardiac arrest, which declared clinical death.

#### Additional information about this case:

https://www.nmpa.gov.cn/directory/web/nmpa/zhuanti/yqyjzxd/yqtb/20200116120001393.html (Wuhan health commission, Jan 16)

The deceased Xiong Moumou, male, 69 years old, became ill on December 31, 2019, and his condition worsened on January 4, 2020, and was transferred to Wuhan Jinyintan Hospital for treatment. He suffered from severe myocarditis when he was admitted to the hospital (myocardial enzymes reached 20 times the normal value, Abnormal electrocardiogram); abnormal renal function; severe damage to multiple organ functions; chest CT showed pulmonary fibrous lesions, pleural effusion, and pleural thickening, and pulmonary tuberculosis and pleural tuberculosis were considered, and died at 00:45 on January 15 due to ineffective rescue .

In the First Level Response movie at 7:20 <a href="http://cov2.free.fr/Covid-FirstLevelResponse/">http://cov2.free.fr/Covid-FirstLevelResponse/</a> Fan Fan says that there was a master, Xiong, who died, working in "our house", clear reference to 69M2. She says he sold shrimps. There is a Fan Hui aquatic products stall on 7th street next to 49M but with no case on the WHO maps. <a href="https://aigicha.baidu.com/company\_detail\_10661293115539">https://aigicha.baidu.com/company\_detail\_10661293115539</a>

His stall is said to be East, 6th 6 in <a href="https://news.ifeng.com/c/7tRy17xyqzw?">https://news.ifeng.com/c/7tRy17xyqzw?</a> CPB 404 L4

But <a href="https://www.qixin.com/company/bc5c317a-531f-4c83-b53c-ef876871e69f">https://www.qixin.com/company/bc5c317a-531f-4c83-b53c-ef876871e69f</a> doesn't list a Xiong owner

Liu Chang (pseudonym), the owner of a battery car repair shop near the Huanan Seafood Market, told reporters that Xiong Yijun (pseudonym)'s shop is at No. 6, Sixth Street, East District. Because of business, Xiong Yijun often goes to and from the western area of the market. Liu Chang believes that this is an important reason for his infection. In his observation, the western area of the South China Market is the hardest hit area of the pneumonia epidemic. "80% of the sick are in the western area."

Xiong Yijun (pseudonym) came to the alleys and neighborhoods on the north side of the East District of Huanan Seafood Market every morning to play chess. Photo by Beijing News reporter Xu Wen Xiong Yijun's business is in the East District, but he lives in the West District. In the old community adjacent to the western area of the seafood market, there are merchants living in the South China Market. Affected by the closure of the market, many residents have returned to their hometowns ahead of schedule for the Chinese New Year. Xiong Yijun lived here before his death. In Liu Chang's view, Xiong Yijun's life trajectory is very fixed. Picking goods at the seafood market at 3 or 4 in the morning, resting until 8 or 9 am, passing through the exit on the north side of the eastern part of the seafood market, and playing chess at the entrance of a grocery store, every day. According to Liu Chang's understanding, Xiong Yijun has three daughters, all of whom do business in the South China Market. One of the daughters is a member of the South China Market Shrimp Industry Association. After Xiong Yijun's death, his three daughters returned to the market, but they were never seen again. He speculated that the daughters may have been quarantined.

In Liu Chang's memory, Xiong Yijun was not tall, looked quite capable, and spoke in a loud voice. Liu Chang was surprised by his sudden death.

#### Discussion of this case:

This article is likely about 69M2 because there were very few deaths announced before Jan 21 (61M 69M2 66M and 48F1)

So this would be contradicting that he was a stall owner.

https://baijiahao.baidu.com/s?id=1656303704660421965&wfr=spider&for=pc

Beijing News Express (Reporter Xu Wen and Wu Jiaoying) According to the Wuhan Health and Health Commission, as of 24:00 on January 19, Wuhan has reported a total of 4 deaths from pneumonia caused by new coronavirus infection. Xia Mei (pseudonym), the owner of the seafood business in the Huanan Seafood Wholesale Market, told reporters that one of the deceased was about 70 years old and was a helper at the market.

Xia Mei has been operating the seafood business in the Huanan Seafood Wholesale Market for seven or eight years. In her memory, the "Old Ghost" was around 70 years old and worked in the market for more than two years. He was responsible for handling goods in many shops in the east and west areas of the market. In her opinion, the "Old Ghost" is very carefree and walks vigorously. Every day at three o'clock in the morning, the market starts to get busy, with

more than 1,000 shops stocking goods, and "Old Ghost" is no exception. In her spare time, Xia Mei often gets together with the neighbors in the market to chat about family affairs, and "old ghosts" also join in when she is not busy. When chatting with Xia Mei, the "Old Ghost" sometimes mentioned that he was old and sick. The Huanan Seafood Wholesale Market has been closed in the early morning of January 1, 2020 for environmental sanitation improvement. After the market closed, Xia Mei never saw the "old ghost" again. "The old ghost is gone." Two days ago, Xia Mei suddenly heard the news of the death of the "old ghost" from the owners of other shops in the market, which surprised her, "They said that people who are usually hot and hot can leave quickly."

# DRASTIC054 Qiu Fenglan

Name Qiu Fenglan
Type Positive
Wet market Exposure
Onset 2019-12-24
1st Admission 2019-12-28

Discharged Death Hospital Dec 31st Lineage Cluster 1st 27 JYT 10 2nd 41 JYT 10 **CN-WHO ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other

6	
Genbank	-
GISAID	-
GW	-
NMDC	-
CNGB	-
BioProject	-
SRP/CRA	-
SRR/CRR	-
SAM	-
Notes	_
2019-12-01	-
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2019-12-03	_
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### Linked cases:

The son **DRASTIC019** 42M

### References for the above summary:

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
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10	江岸区	女70	给儿子送饭
	Jiang'an	Female	Gives food to her son

She is the mother of the mother & son cluster mentioned in <a href="http://zhishifenzi.blog.caixin.com/archives/221847">http://zhishifenzi.blog.caixin.com/archives/221847</a> as delivering meals

The son named Chen Sanhong (陈三红) isn't Wuhan-Hu-1 41M2 because he is said to sell poultry and to be hospitalized after his mom. <a href="https://archive.is/wgtCY">https://archive.is/wgtCY</a>

The mother and son cluster is mentioned in the Dec 30 Wuhan-Hubei CDC non-public document <a href="https://justpaste.it/9r4rm">https://justpaste.it/9r4rm</a> so her name would be Qiu Fenglan (邱风兰) and she would have been hospitalized in Wuhan central hospital.

They are mentioned in

https://matters.news/@2020Era/%E5%8F%91%E5%93%A8%E5%AD%90%E7%9A%84%E4%BA%BA-bafyreihrpvzudkmtakoxvquhhw75ajqvhkn4oxb4pges3od5rqusa436ba (the mother, delivering meals)

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html (Chen 41M Wuhan-Hu-1 from Houhu branch and self-employee) http://web.archive.org/web/20200326145819/https://mp.weixin.qq.com/s/1zNY2YXy75snzwX3T g09Cg (mother and son, likely Houhu district, The son worked in the Huanan Seafood Market. The mother went to the seafood market to deliver meals. She had never touched any items in the Huanan Seafood Market, but she was still sick and was in a serious condition ) Department of Pulmonary and Critical Care Medicine, The Central Hospital of Wuhan, China https://www.ncbi.nlm.nih.gov/sra/SRR10971381 in the metadata (full xml download) it is said to be from "Department of Pulmonary and Critical Care Medicine, The Central Hospital of Wuhan, China" see also the Central hospital authors of the Wuhan-Hu-1 paper. https://www.biorxiv.org/content/10.1101/2020.01.24.919183v2.full.pdf the Wuhan-Hu-1 preprint includes a table

Characteristic	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6	Patient 7
Age (Year)	41	44	42	70	31	51	43
Sex	M	F	M	F	M	M	M
Date of illness onset	Dec 20,2019	Dec 22,2019	Dec 24,2019	Dec 24,2019	Dec 21,2019	Dec 16,2109	Dec 14,2019
Date of admission	Dec 26,2019	Dec 22,2019	Dec 28,2019	Dec 28,2019	Dec 28,2019	Dec 27,2019	Dec 14,2019
Fever	+	+	+	+	+	+	+
Body Temperature (°C)	38.4	37.3	39	37.9	38.7	37.2	38
Cough	+	+	+	+	+	+	+
Sputum Production	+	+				-	+
Dizzy	+	1.25	+	+		+	- 2
Weakness	+		+		-		
Chest tightness	+	-		+	+	12	21
Dyspnea	+			+	+	+	
Bacterial culture			streptococcus pneumoniae	streptococcus pneumoniae		-	streptococcu
Glucocorticoid therapy	No	No	Yes	Yes	Yes	Yes	No
Antibiotic therapy	Cefoselis	Ceftazidime, Levofloxacin	Cefminox	Cefminox, moxifloxacin	Cefminox	No	No
Antiviral therapy	Oseltamivir	No	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	No
Oxygen therapy	mechanical ventilation	No	No	Mask	No	No	No

https://archive.ph/wqtCY#selection-2047.144-2047.216 confirms the mother and son cluster, the son is middle aged, the mother hospitalized before him (so he wouldn't be 41M2), the mother who comes to deliver meal. Also mentions that the man ran a poultry shop in the Huanan Seafood Market, whereas in the Wuhan-Hu-1 paper "he recalled no exposure to live poultry".

The narrator is a patient hospitalized for something else, admitted on Dec 27, so after 41M2.  $\rightarrow$  the son could be 42M, not 41M2.

### Additional information about this case:

#### https://archive.is/wgtCY

#### Original

急诊病房一位60多岁的患者李静(化名)告诉新京报记者,她因胆囊疾病于12月27日进入武汉中心医院后湖院区治疗,此后,陆续看到4位华南海鲜市场的商户因肺炎来到急诊病房就诊。

据李静回忆,第一名来自华南海鲜市场的肺炎病人住院时,医院方面未认为异常,让 那位病人和其余病人一起住在急诊病房。不久,一位中年男子陪母亲来住院,该男子在华 南海鲜市场经营一家家禽店,他母亲出现了肺炎的一些症状,一直高烧不退。而该男子很 快也开始发烧,随即和母亲一起住院。

"他的家人来陪床时向医生提起,华南海鲜市场最近有好几个人都因为类似症状住院了,有人在同济医院,有人在协和医院。"李静说,后湖院区此时已有三位和华南海鲜市场有关的肺炎患者住院,医生开始有所警惕,询问记录这三位患者的职业情况,得**知那位男子的母亲经常前往华南海鲜市场送饭。** 

#### Translation

Li Jing (pseudonym), a 60-year-old patient in the emergency ward, told the Beijing News that she was admitted to the Houhu District of Wuhan Central Hospital on December 27 due to gallbladder disease. Since then, she has seen **4 people from the South China Seafood Market**. The merchant came to the emergency ward for pneumonia.

According to Li Jing's recollection, when the first patient with pneumonia from the South China Seafood Market was hospitalized, the hospital did not consider it abnormal, so the patient was admitted to the emergency ward with the rest of the patients.

Soon, a middle-aged man accompanied his mother to the hospital. The man ran a poultry shop in the South China Seafood Market. His mother developed some symptoms of pneumonia and had a high fever. The man soon developed a fever and was hospitalized with his mother.

"His family told the doctor when they came to accompany the bed. Recently, several people in the South China Seafood Market had been hospitalized with similar symptoms. Some were in Tongji Hospital and some were in Xiehe Hospital." Li Jing said that there are already three people in the Houhu campus at this time. A patient with pneumonia in the South China Seafood Market was hospitalized. The doctor began to be vigilant and asked to record the occupational status of the three patients. He learned that the man's mother often went to the South China Seafood Market to deliver meals.

### Discussion of this case:

# DRASTIC055 Qi Xishan

Age&Sex 78M
Chinese name 祁喜山
Name Qi Xishan
Type Positive
Wet market No
Onset 2019-12-19

1st Admission Discharged Death -

Hospital Dec 31st Jinyintan

Lineage

Cluster Li 3.3, NHC27

1st 27 JYT 24 2nd 41 JYT 24 CN-WHO -ICU JYT -WIV -IPBCAMS-WH-HBCDC-HB- -

WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes father-in-law 49M 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26

2019-12-27 2019-12-28

2019-12-29	_
2019-12-30	_
2019-12-31	Jinyintan
2020-01-01	Jinyintan
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

## Linked cases:

Connected to Wei Guixian shrimp vendor <a href="DRASTIC040">DRASTIC040</a> by the market

Connected to <a href="DRASTIC029">DRASTIC029</a> <a href="DRASTIC029">DRASTIC030</a> by the Huanan Market Family Cluster Connected to <a href="DRASTIC052">DRASTIC052</a> 69M1 via (hotel name) Hotel

## References for the above summary:

### Patient List Video

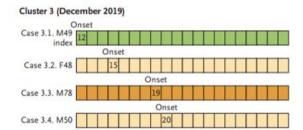
https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

#	District	Sex/Age	Business at the Market
24	研口	男 78	退休
	Qiaokou	Male	Retired

## Video Thumbnail https://archive.vn/f1A7b



Cluster 3 M50 of Li et al. 2020



### Additional information about this case:

兰小22硚口男49岁经营者,卖 干调,油盐 酱醋22 Qiaokou Male 49 years old Operator, selling dry goods and condiments, oil, salt, sauce and vinegar部23硚口女48岁经营者,卖 干调,油盐 酱醋23 Qiaokou Female 48-year-old operator, selling dry goods and condiments, oil, salt, sauce and vinegar部24硚口男 78岁 退休24 Qiaokou male 78 years old retired兰21硚口男50y采购经营者,各类调料21 Qiaokou Male 50y Procurement operator, all kinds of spices

#### Discussion of this case:

Could he be the 78U mentioned in <a href="https://www.sohu.com/a/376047105">https://www.sohu.com/a/376047105</a> 113767

On January 29, good news came from Wuhan Tongji Hospital: a 78-year-old patient with new coronavirus infection was discharged! This is the oldest of the critically ill patients in Wuhan. The first patient diagnosed with the new coronavirus was received by Zhao Jianping. "Before coming to Tongji Hospital, the patient had done some tests. The test results at that time suggested that the coronavirus was mutated, but it was impossible to know what kind of coronavirus it was. The patient's condition at the time was that he had difficulty breathing, gasping, and was Immediately arrange hospitalization," Zhao Zhaojianping recalled.

### DRASTIC057

Age&Sex UU Chinese name XXX Name XXXPositive Type Wet market Vendor Onset

2019-12-29 1st Admission

Discharged Death

Hospital Dec 31st Jinyintan

Lineage Cluster 1st 27 JYT 1 2nd 41 JYT 1 CN-WHO

ICU-03 **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03

2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08

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2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	-
2019-12-29	Jinyintan
2019-12-30	Jinyintan
2019-12-31	Jinyintan
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
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2020-01-15	-
2020-01-16	-
2020-01-17	-
2020-01-18	-
2020-01-19	-
2020-01-20	-
2020-01-21	-

2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check Linked cases:	
References for	r the above summary:
Additional info	rmation about this case:
Discussion of t	this case:

DRASTIC058 Connor Reed

Age&Sex 25M

Chinese name 瑞康耐 ---- IIRC --- check

Name Connor Reed

Type Positive --- only his word

Wet market No ---sometimes

Onset 2019-11-25

1st Admission 2019-12-06 ??????????????

Discharged -

Death October 2020 age 26

Hospital Dec 31st No? Lineage -Cluster -

1st 27 JYT 24????? 2nd 41 JYT 24??????

CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC CNGB BioProject SRP/CRA SRR/CRR SAM

Notes -Many

2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 -

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2019-12-10
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2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

#### Connor Reed

Chinese name: 瑞康耐

His website showing didnt work monday

His linked in -the photo - why we think the link to the english place

- -Developed a fever Nov. 25
- -Diagnosed with pneumonia Dec. 6 at Zhongnan Hospital, a tertiary care hospital affiliated with Wuhan University School of Medicine. Several hundred foreign medical students are there which was his motivation for going. Worth looking for contacts among them.
- -Well known hospital doctor mentions seeing imagery that looked like SARS on Dec. 7 (next day) but this may be typo of Dec. 27 https://t.co/yjdXi8FoVj
- -Told by the hospital he'd had Covid on Jan 15
- -Lived in Building 1 of the Wufeng Jiayuan Phase II development 武丰佳园二期-1栋 in north Wuchang District. (not near the labs). Video shows him walking out of east door of the building,, through gate, to nearby shops. View of gate below.



-Likely worked at one of Shane English School's Wuhan locations on the 3rd Floor of Aoshan Century City, Heping Avenue, Qingshan District, Wuhan 武汉市青山区和平大道奥山世纪城3楼. His LinkedIn photo shows him standing in front of a Shane school poster and he lived only 3km away from a Shane location. An ad for an English teacher manager posted for Shane in 2018 matches reference to him being a manager

- Second possibility - ebay english

-A video shows him walking north on Sanyang Rd and down Jiefang Ave to a pharmacy at 1775 Jiefang.

-Age 25. Died back in Wales in his room at Ffriddoedd Road, Bangor, last October. He was studying at Bangor University.

https://www.northwaleschronicle.co.uk/news/19061324.inquest-opens-death-welsh-student-first-britknown-coronavirus/

"the provisional cause of death was given as respiratory failure due to bronchopneumonia caused by combined drug toxicity"

 $\underline{\text{https://www.dailypost.co.uk/news/north-wales-news/inquest-first-known-brit-catch-19758643}}$ 

The death is not being treated as suspicious.

https://news.sky.com/story/connor-reed-family-of-first-briton-known-to-have-caught-covid-may-never-know-truth-about-his-death-12126254

-Links:

Video from walks around apartment and walk to pharmacy on Jiefang Ave 25 minutes away <a href="https://youtu.be/IR09P2hIL">https://youtu.be/IR09P2hIL</a> k

#### Diary of illness:

 $\underline{https://www.dailymail.co.uk/news/article-8075633/First-British-victim-25-describes-coronavirus.html}$ 

#### News of death

 $\underline{\text{https://news.sky.com/story/connor-reed-family-of-first-briton-known-to-have-caught-covid-may-never-know-truth-about-his-death-12126254}$ 

Connor Reed's Cat

### **DRASTIC059 Jamie Morris**

How strong is his case - do we include him?

- -Did not know Connor Reed per confidential communication confidential as in we can't publish it?
- -Diagnosed with pneumonia in December before testing available. Never tested. Sick for two weeks
- -Worked at Maron Carey Raycom Children's International School in Jianghan District

马荣凯瑞融科儿童国际学校(融科天....

湖北省-武汉市-江岸区-球场街融科天城小区三期内



-Probably coincidence but footage of Connor Reed shows him passing only 300m from this same school on Sanyang Rd on the way to a pharmacy



## DRASTIC060

Age&Sex 89M Chinese name  $\pm xx$ XX Wang Name ???????????? Type ???????????????? Wet market Onset

1st Admission 2020-01-05

Discharged Death Υ Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT **CN-WHO** ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH

WH190 WHU Other Genbank GISAID GW NMDC CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02

**IVDC** 

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2020-01-07
                    Tongji
2020-01-08
                    Tongji - transfer to emergency
2020-01-09
                    Tongji - transfer to emergency fever clinic
2020-01-10
                    Tongji
2020-01-11
                    Tongji
2020-01-12
                    Tongji
2020-01-13
                    Tongji - ventilation
2020-01-14
2020-01-15
                    Tongji - infectious diseases ward
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2020-01-16	Tongji
2020-01-17	Tongji
2020-01-18	Tongji - death.
2020-01-19	-
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

### Linked cases:

### References for the above summary:

NHC - National Health Commission

 $\frac{\text{http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml}}{\text{https://archive.vn/gkpzs}}$ 

三、王XX,男,89岁,既往有高血压、脑梗塞、脑软化病史。因尿失禁于2020年1月5日就诊于同济医院泌尿外科,1月8日因嗜睡、神志不清转入急诊科就诊。检查提示肺部感染(病毒性肺炎)、急性呼吸衰竭。1月8日体检发现患者77mmHg,有缺氧表现。肺部CT呈双肺斑片影,双侧少量胸腔积液,胸膜粘连。血常规示白细胞总数进行性增高,淋巴细胞计数低。1月9日转入发热门诊观察病房抢救治疗,给予对症支持治疗。1月13日予呼吸机辅助正压通气。1月14日出现昏睡,在呼吸机辅助通气下,血氧饱和度波动在50%-85%

之间。1月15日收入感染科病房。1月18日10时30分转院前Bp140/78mmHg,无创呼吸机辅助通气下SPO2 85%。转运途中,患者出现呼吸心跳骤停,持续抢救2小时,治疗无效于2020年1月18日13时37分宣告临床死亡。

#### Translation

3. Wang XX, male, 89 years old, has a history of hypertension, cerebral infarction, and encephalomalacia. He was admitted to the Department of Urology, Tongji Hospital on January 5, 2020 due to urinary incontinence, and was transferred to the emergency department on January 8 due to lethargy and unconsciousness. The examination revealed lung infection (viral pneumonia) and acute respiratory failure. Physical examination on January 8 revealed that the patient was 77mmHg with hypoxia. CT of the lungs showed patches of both lungs, a small amount of pleural effusion on both sides, and pleural adhesions. The blood test showed a progressive increase in the total number of white blood cells and a low lymphocyte count. On January 9, he was transferred to the observation ward of the fever clinic for emergency treatment and was given symptomatic and supportive treatment. On January 13, a ventilator assisted positive pressure ventilation. On January 14th, she appeared drowsy. Under ventilator-assisted ventilation, blood oxygen saturation fluctuated between 50%-85%. He was admitted to the Infectious Diseases Ward on January 15. Bp140/78mmHg before transfer at 10:30 on January 18, SPO2 85% under non-invasive ventilator-assisted ventilation. During the transfer, the patient suffered a respiratory and cardiac arrest, and the rescue was continued for 2 hours. The treatment was ineffective and clinical death was declared at 13:37 on January 18, 2020.

Additional information about this case:

Discussion of this case:

## DRASTIC061

Age&Sex 89M Chinese name 陈XX Name XX Chen

Type -Wet market -

Onset 2020-01-13 1st Admission 2020-10-18

Discharged Death Υ Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02

2019-12-03 2019-12-04

2019-12-05	-
2019-12-06	-
2019-12-07	-
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2019-12-12	-
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2019-12-14	-
2019-12-15	-
2019-12-16	-
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2019-12-22	-
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2019-12-31	-
2020-01-01	-
2020-01-02	-
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2020-01-14	_
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2020-01-16	_
2020-01-17	_

2020-01-18	Wuhan Union Hospital
2020-01-19	Wuhan Union Hospital - Died.
2020-01-20	-
2020-01-21	-
2020-01-22	-
2020-01-23	-
2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
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### Linked cases:

## References for the above summary:

NHC - National Health Commission

 $\frac{http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml}{https://archive.vn/gkpzs}$ 

四、患者陈X,男,89岁,既往有高血压、糖尿病、冠心病、频发室性早搏,冠脉支架植入术后。患者于2020年1月13日发病,就诊4小时前无明显诱因喘气,自感呼吸困难,无发热。1月18日因严重呼吸困难至武汉协和医院急诊科救治。患者高龄,病原学检查肺炎衣原体阳性,无甲乙流,新型冠状病毒阳性,肺部CT:病毒性肺炎典型改变。于2020年1月19日23时39分病情恶化,抢救无效死亡。

#### Translation

4. Patient Chen X, male, 89 years old, had previous hypertension, diabetes, coronary heart disease, frequent ventricular premature contractions, and coronary stent implantation. The patient became ill on January 13, 2020. There was no obvious inducement to breathe 4 hours before the treatment, self-feeling difficulty in breathing, and no fever. On January 18, he was sent to the emergency department of Wuhan Union Hospital for treatment due to severe breathing difficulties. The patient was elderly, the pathogenic examination was positive for Chlamydia pneumoniae, without A and B influenza, positive for the new type of coronavirus, lung CT: typical changes in viral pneumonia. At 23:39 on January 19, 2020, his condition deteriorated and the rescue failed and died.

### Additional information about this case:

Discussion of this case:

## DRASTIC062

Age&Sex 66M
Chinese name 李XX
Name XX Li
Type Wet market -

Onset 2020-01-10 1st Admission 2020-01-16

Discharged Death Y
Hospital Dec 31st Lineage -

Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW **NMDC** CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20

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                   WISCO General Hospital
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#### Linked cases:

### References for the above summary:

NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

五、李XX,男,66岁,既往有慢阻肺,高血压病,2型糖尿病,慢性肾功能不全,2007年 升主动脉人工主动脉置换术,2017年腹主动脉支架置入术,胆囊切除术,多脏器功能损害 。患者因间断咳嗽、头痛、乏力伴发热6天于2020年1月16日收入武钢总医院。1月16日胸 部CT显示双侧肺炎、左上肺纤维化灶、左上肺小结节影。1月17日出现呼吸困难,血气分 析提示1型呼吸衰竭,给予面罩吸氧、抗感染、抗病毒、化痰等对症处理。1月20日10时 10分 患者于突然出现指脉氧降低至40%,已予无创呼吸机辅助通气治疗,再次告知家属 患者重度呼吸衰竭,再次询问是否行气管插管,拒绝行气管插管。1月20日10时35分病情 恶化抢救无效死亡。

#### Translation

5. Li XX, male, 66 years old, with previous chronic obstructive pulmonary disease, hypertension, type 2 diabetes, chronic renal insufficiency, ascending aorta artificial aortic replacement in 2007, abdominal aortic stenting in 2017, Cholecystectomy, multiple organ dysfunction. The patient was admitted to WISCO General Hospital on January 16, 2020 due to intermittent cough, headache, fatigue and fever for 6 days. Chest CT on January 16 showed bilateral pneumonia, left upper lung fibrosis, and left upper lung nodules. Difficulty of breathing occurred on January 17, and blood gas analysis revealed type 1 respiratory failure. Symptomatic treatment was given to mask oxygen, anti-infection, anti-virus, and phlegm removal. At 10:10 on January 20, the patient suddenly appeared that

the finger pulse oxygen was reduced to 40%, and was treated with non-invasive ventilator-assisted ventilation. The family members were told again that the patient had severe respiratory failure, and asked again whether to perform tracheal intubation, and refused to perform tracheal intubation. At 10:35 on January 20, his condition deteriorated and died.

Additional information about this case:

Discussion of this case:

## DRASTIC063

 $\begin{array}{lll} \mbox{Age\&Sex} & \mbox{75M} \\ \mbox{Chinese name} & \mbox{$\pm$XX} \\ \mbox{Name} & \mbox{XX Wang} \end{array}$ 

Type -Wet market -

Onset 2020-01-06 1st Admission 2020-01-11

Discharged -

Death Y 2020-01-20

Hospital Dec 31st -Lineage -Cluster -1st 27 JYT -

2nd 41 JYT **CN-WHO ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC CNGB **BioProject** SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22

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                    Onset Vomit
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                    Wuhan Fifth Hospital
                    Wuhan Fifth Hospital
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2020-01-13
                    Wuhan Fifth Hospital
2020-01-14
                    Wuhan Fifth Hospital
                    Wuhan Fifth Hospital - Ventilation
2020-01-15
                    Wuhan Fifth Hospital
2020-01-16
                    Wuhan Fifth Hospital
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                    Wuhan Fifth Hospital
2020-01-19
                    Wuhan Fifth Hospital
2020-01-20
                    Wuhan Fifth Hospital - Dead
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2020-01-31
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#### Linked cases:

### References for the above summary:

NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

六、王XX、男、75岁、因发热伴咳嗽、咳痰5天、呕吐2天于2020年1月11日17时19分收入武汉市第五医院。既往有高血压病和髋关节置换术史。入院体温38.2℃,伴乏力、纳差、咳嗽、鼻塞、头昏、头痛,无明显畏寒、寒颤、肌肉关节酸痛。胸部CT提示双肺间质感染。

入院后告病危,予以吸氧、抗感染、抗病毒,化痰,酌情退热,予以补液等对症治疗。患者病情进行性加重,1月15日转入ICU,行机械通气。1月20日11时25分宣告死亡。

#### Translation

6. Wang XX, male, 75 years old, was admitted to Wuhan Fifth Hospital at 17:19 on January 11, 2020 due to fever with cough, sputum expectoration for 5 days, and vomiting for 2 days. He has a history of hypertension and hip replacement surgery. The admission temperature was 38.2°C, accompanied by fatigue, anorexia, cough, nasal congestion, dizziness, headache, no obvious chills, chills, muscle and joint aches. Chest CT showed interstitial infection in both lungs.

After being admitted to the hospital, he was critically ill. He was given oxygen, anti-infection, anti-virus, phlegm, fever as appropriate, and fluid supplements and other symptomatic treatments. The patient's condition worsened progressively and was transferred to the ICU on January 15 for mechanical ventilation. He was declared dead at 11:25 on January 20.

Additional information about this case:

Discussion of this case:

# DRASTIC064

Age&Sex 82M
Chinese name 対XX
Name XX Liu
Type Wet market -

Onset 2020-01-09 1st Admission 2020-01-14

Discharged -

Death Y 2020-01-21

Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WHHBCDC-HB- -

WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26 2019-12-27 2019-12-28

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## References for the above summary:

NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

八、刘XX,男,82岁,因全身畏寒酸痛5天于2020年1月14日15时41分收入武汉市第五医院。给予心电监护、无创呼吸机辅助呼吸、抗感染、抗病毒及支持对症治疗。1月19日出现吐词不清、左侧肢体乏力,考虑脑卒中,病情进展加重,出现呼吸衰竭持续加重。1月21日00时30分患者突发心率进行性下降,心音闻不及,大动脉搏动消失,立即抢救,家属仍拒绝气管插管机械通气,持续抢救,心率始终无恢复,1时18分宣告临床死亡。

#### Translation

8. Liu XX, male, 82 years old, was admitted to Wuhan Fifth Hospital at 15:41 on January 14, 2020 due to chills and aches all over the body for 5 days. Give ECG monitoring, non-invasive ventilator assisted breathing, anti-infection, anti-virus and support symptomatic treatment. On January 19, he developed slurred speech and weakness in the left limb. Considering a stroke, the disease progressed and the respiratory failure continued to worsen. At 00:30 on January 21, the patient had a sudden decrease in heart rate, his heart sounds could not be heard, and the aortic pulsation disappeared. The patient was rescued immediately. The family still refused mechanical ventilation of the tracheal intubation and continued rescue. The heart rate never recovered. The clinic announced death at 1:18.

Additional information about this case:

Discussion of this case:

DRASTIC065

Age&Sex 81M Chinese name 张XX Name XX Zhang

Type Wet market Onset 1st Admission Discharged -

Death Y 2020-01-22

Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05

2019-12-06 2019-12-07 2019-12-08

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                   Wuhan First Hospital
2020-01-19
                   Wuhan First Hospital
2020-01-20
                   Wuhan First Hospital
2020-01-21
                   Wuhan First Hospital
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2020-01-24	-
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2020-01-31	-
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## References for the above summary:

## NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

十、张XX,男,81岁,2020年1月18日因发热3天收入武汉市第一医院。入院胸部CT显示 双肺感染性病变,考虑病毒性肺炎,患者肾功能及肺部感染情况持续恶化,于2020年1月 22日上午逐渐出现意识不清,呼吸心率血压持续下降不能维持,患者家属签字拒绝胸外按 压、气管切开等抢救措施,患者于1月22日10时56分呼吸心跳停止,宣告临床死亡。

#### Translation

10. Zhang XX, male, 81 years old, was admitted to Wuhan First Hospital on January 18, 2020 due to fever for 3 days. Chest CT of the admission showed infectious lesions in both lungs. Considering viral pneumonia, the patient's renal function and lung infection continued to deteriorate. On the morning of January 22, 2020, he gradually became unconscious, and the respiratory, heart rate and blood pressure continued to drop. The patient's family members Signing refusal of rescue measures such as chest compressions

and tracheotomy, the patient stopped breathing and heartbeat at 10:56 on January 22, and declared clinical death.

# Additional information about this case:

Discussion of this case:

# DRASTIC066

Age&Sex 82F
Chinese name 张XX
Name XX Zhang

Type -Wet market -

Onset Unclear - before 2020-01-03

1st Admission Unclear - between 2020-01-03 and 2020-01-20

 Discharged

 Death
 Y

 Hospital Dec 31st

 Lineage

 Cluster

 1st 27 JYT

 2nd 41 JYT

 CN-WHO

 ICU JYT

 WIV

 IPBCAMS-WH 

 HBCDC-HB 

 WH

**IVDC** WH190 WHU Other Genbank GISAID GW **NMDC** CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26 2019-12-27 2019-12-28 2019-12-29

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                    Jinyintan - Ventilation then death
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## References for the above summary:

NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

十一、张XX,女,82岁,既往有帕金森病史5年,口服美多芭。2020年1月3日发病,因"发热咳嗽胸闷乏力"于1月6日就诊于湖北省中西医结合医院,诊断"病毒性肺炎、呼吸衰竭"。1月20日转入武汉市金银潭医院,病情进行性加重,于1月22日行气管插管呼吸机支持治疗,呼吸衰竭无改善,于2020年1月22日18时经抢救无效宣告临床死亡。

#### Translation

11. Zhang XX, female, 82 years old, with a history of Parkinson's disease for 5 years, oral Medopa. On January 3, 2020, she was diagnosed with "viral pneumonia, respiratory failure" at Hubei Provincial Hospital of Integrated Traditional Chinese and Western Medicine due to "fever, cough, chest tightness, and fatigue". She was transferred to Wuhan Jinyintan Hospital on January 20, and his condition worsened. On January 22, he underwent endotracheal intubation ventilator support treatment. Respiratory failure did not improve. At 18:00 on January 22, 2020, he was declared clinically dead after the rescue was invalid.

## Additional information about this case:

Discussion of this case:

DRASTIC067

Age&Sex 65M3 Chinese name 周XX XX Zhou Name Type Wet market Onset 1st Admission Discharged Death Υ Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05

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                   Wuhan No. 1 Hospital
2020-01-19
                   Wuhan No. 1 Hospital
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2020-01-21
                   Wuhan No. 1 Hospital - Died.
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2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check -

## Linked cases:

## References for the above summary:

## NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

十二、周XX,男,65岁,2020年1月11日因气促伴乏力3天,加重3天收入武汉市第一医院。入院时患者呼吸困难,胸闷气促,急性病面容,诊断为重症肺炎、急性呼吸衰竭、肝功能损害。1月21日19时出现心率、血压下降,双瞳对光反射消失,即刻行气管插管、人工胸外按压、强心等治疗,至19时54分未再恢复自主心律,宣告临床死亡。

#### Translation

12. Zhou XX, male, 65 years old, was admitted to Wuhan No. 1 Hospital for 3 days due to shortness of breath and fatigue on January 11, 2020. Upon admission, the patient had difficulty breathing, chest tightness, shortness of breath, and an acute appearance. He was diagnosed with severe pneumonia, acute respiratory failure, and liver damage. At 19:00 on January 21, the heart rate and blood pressure decreased, and the light reflection of the pupils disappeared. He was immediately treated with tracheal intubation, artificial

chest compressions, and cardiac intubation. At 19:54, he did not resume his spontaneous heart rhythm and declared clinical death.

# Additional information about this case:

Discussion of this case:

# DRASTIC068

Age&Sex 80F
Chinese name 胡XX
Name XX Hu
Type Positive

Wet market -

Onset Unclear 2020-01-09 to 2020-01-11

1st Admission 2020-01-18

Discharged Υ Death Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** 

WH190 WHU Other Genbank GISAID GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 2019-12-25 2019-12-26 2019-12-27 2019-12-28 2019-12-29 2019-12-30 2019-12-31

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References for the above summary:

## NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

十三、胡XX,女,80岁,2020年1月11日发病。因发热、咳嗽9天,喘息、呼吸困难于2020年1月18日入住华润武钢总医院,因新型冠状病毒核酸阳性,于2020年1月20日转入武汉市金银潭医院。既往有高血压病史20余年,有糖尿病史20余年,有帕金森病史。入院后告病危,重症监护,行抗感染、呼吸机辅助呼吸及对症支持治疗。但患者病情无好转,持续低氧血症、神志不清,机械呼吸机辅助呼吸,2020年1月22日16时经抢救无效,宣告临床死亡。

#### Translation

13. Hu XX, female, 80 years old, became ill on January 11, 2020. She was admitted to China Resources WISCO General Hospital on January 18, 2020 due to fever and cough for 9 days, and was transferred to Wuhan Jinyintan Hospital on January 20, 2020 due to the positive nucleic acid of the novel coronavirus. He has a history of hypertension for more than 20 years, a history of diabetes for more than 20 years, and a history of Parkinson's disease. After admission, She was critically ill and received intensive care, anti-infection, ventilator-assisted breathing, and symptomatic supportive treatment. However, the patient's condition did not improve, continued hypoxemia, unconsciousness, and mechanical ventilator assisted breathing. At 16:00 on January 22, 2020, the rescue was invalid, and clinical death was declared.

Additional information about this case:

Discussion of this case:

DRASTIC069

Age&Sex 53M
Chinese name 雷XX
Name XX Lei
Type -

Wet market -

Onset Unclear - Fever beginning of January, community hospital

1st Admission Discharged Death Υ Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC CNGB BioProject SRP/CRA

SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 -

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#### Linked cases:

## References for the above summary:

## NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

十四、雷XX,男,53岁。1月初因发热一直在社区医院治疗,治疗数日后无效,发热、咳嗽、胸闷加重。2020年1月13日到同济医院急诊科就诊,CT显示双肺感染,呼吸衰竭;1月18日告病危,行无创呼吸机支持治疗,2020年1月20日转入武汉市金银潭医院隔离治疗。入院经抗感染抗休克,呼吸机辅助呼吸支持治疗,患者病情无好转,呼吸衰竭继续加重,1月21日4时余经抢救无效,宣告临床死亡。

#### Translation

14. Lei XX, male, 53 years old. At the beginning of January, he had been treated in a community hospital due to fever, but the treatment was ineffective after a few days. The fever, cough, and chest tightness became worse. Visited the emergency department of Tongji Hospital on January 13, 2020. CT showed lung infection and respiratory failure. On January 18, he was critically ill and received non-invasive ventilator support treatment. On January 20, 2020, he was transferred to Wuhan Jinyintan Hospital for isolation treatment.

. After being admitted to hospital with anti-infective and anti-shock, ventilator-assisted respiratory support treatment, the patient's condition did not improve, and the respiratory failure continued to worsen. At 4 o'clock on January 21, the rescue was invalid, and clinical death was declared.

Additional information about this case:

Discussion of this case:

# DRASTIC070

 $\begin{array}{lll} \mbox{Age\&Sex} & 86\mbox{M} \\ \mbox{Chinese name} & \mbox{$\pm$XX$} \\ \mbox{Name} & \mbox{$XX$ Wang} \end{array}$ 

Type -Wet market -

Onset 2020-01-02 estimated

1st Admission Discharged Death Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT **CN-WHO** ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190

WHU

Other	-
Genbank	-
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NMDC	_
CNGB	_
BioProject	_
SRP/CRA	_
SRR/CRR	_
SAM	_
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References for the above summary:

## NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

十五、王XX,男,86岁,2020年1月9日因乏力1周就诊收入新华医院。无发热,有糖尿病高血压及结肠癌手术后4年。入院后肺部CT见双肺多发磨玻璃影,缺氧明显,进食困难、呼吸加快、昏睡等。家属拒绝插管,仅经鼻吸氧,于2020年1月21日17时50分心跳呼吸停止,宣告临床死亡。

#### Translation

15. Wang XX, male, 86 years old, was admitted to Xinhua Hospital on January 9, 2020 due to fatigue for one week. No fever, diabetic hypertension and colon cancer 4 years after surgery. After admission, lung CT showed multiple ground-glass shadows in both lungs, with obvious hypoxia, difficulty in eating, rapid breathing, and lethargy. The family refused to intubate and only inhaled oxygen through the nose. At 17:50 on January 21, 2020, the heartbeat stopped breathing, and clinical death was declared.

## Additional information about this case:

Discussion of this case:

# DRASTIC071

Age&Sex 70F
Chinese name 袁XX
Name XX Yuan

Type -

Wet market

Unclear - continued fever before 2020-01-13 Onset

1st Admission Discharged Death Υ Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT **CN-WHO** ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC

**CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01

2019-12-02

2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10

2019-12-11 2019-12-12 2019-12-13

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2019-12-31
2020-01-01
2020-01-02
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2020-01-05
2020-01-06
2020-01-07
2020-01-08
2020-01-09
2020-01-10
2020-01-11
2020-01-12
2020-01-13
                   Wuhan No.1 Hospital
2020-01-14
                   Wuhan No.1 Hospital
2020-01-15
                   Wuhan No.1 Hospital
2020-01-16
                   Wuhan No.1 Hospital
                   Wuhan No.1 Hospital
2020-01-17
2020-01-18
                   Wuhan No.1 Hospital
2020-01-19
                   Wuhan No.1 Hospital
2020-01-20
                   Wuhan No.1 Hospital
2020-01-21
                   Wuhan No.1 Hospital - Died.
2020-01-22
2020-01-23
2020-01-24
2020-01-25
2020-01-26
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2020-01-27 -2020-01-28 -2020-01-29 -2020-01-30 -2020-01-31 check -

## Linked cases:

## References for the above summary:

NHC - National Health Commission

http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml https://archive.vn/gkpzs

十六、袁XX,女,70岁。2020年1月13日因持续高热收入市第一医院。入院时神志模糊,急性病容,心音减弱,双肺呼吸音粗,影像学结果见肺部感染较重。考虑重症肺炎,且存在严重的呼吸衰竭。即予以积极抗感染、吸氧等对症治疗,但呼吸衰竭难以纠正。患者于2020年1月21日因呼吸衰竭宣告死亡。

## Translation

16. Yuan XX, female, 70 years old. On January 13, 2020, due to the continued high fever admitted to first City hospital. On admission, she was confused, had an acute appearance, weakened heart sounds, and thick breath sounds in both lungs. The imaging results showed that the lung infection was severe. Consider severe pneumonia with severe respiratory failure. That is, symptomatic treatments such as active anti-infection and oxygen inhalation are given, but respiratory failure is difficult to correct. The patient was declared dead on January 21, 2020 due to respiratory failure.

## Additional information about this case:

Discussion of this case:

# DRASTIC072

Age&Sex 84M
Chinese name 詹XX
Name XX Zhan
Type -

Wet market -

Onset 2020-01-06 1st Admission 2020-01-09

Discharged Death Υ Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB- $\mathsf{WH}$ IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB** 

BioProject SRP/CRA

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SRR/CRR
SAM
Notes
2019-12-01
2019-12-02
2019-12-03
2019-12-04
2019-12-05
2019-12-06
                    Onset
2019-12-07
2019-12-08
                    City Fifth Hospital
2019-12-09
2019-12-10
                    City Fifth Hospital
2019-12-11
                    City Fifth Hospital
2019-12-12
                    City Fifth Hospital
2019-12-13
                    City Fifth Hospital
                    City Fifth Hospital
2019-12-14
                    City Fifth Hospital
2019-12-15
2019-12-16
                    City Fifth Hospital
2019-12-17
                    City Fifth Hospital
2019-12-18
                    City Fifth Hospital - ICU
                    City Fifth Hospital
2019-12-19
2019-12-20
                    City Fifth Hospital
2019-12-21
                    City Fifth Hospital
                    City Fifth Hospital - Died
2019-12-22
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2019-12-31
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2020-01-02
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2020-01-04
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2020-01-10
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2020-01-11 2020-01-12 2020-01-13 2020-01-14 2020-01-15 2020-01-16 2020-01-17 2020-01-18 2020-01-19 2020-01-20 2020-01-21 2020-01-22 2020-01-23 2020-01-24 2020-01-25 2020-01-26 2020-01-27 2020-01-28 2020-01-29 2020-01-30 2020-01-31 check

## Linked cases:

## References for the above summary:

NHC - National Health Commission

 $\frac{\text{http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml}{\text{https://archive.vn/gkpzs}}$ 

十七、詹XX,男,84岁。患者因发热、咳嗽、喘气3天于2020年1月9日17时4分收入市第 五医院治疗。既往有慢性支气管炎、不稳定型心绞痛、冠状动脉支架术、高血压病、消化 道出血、肾功能不全、高脂血症、高尿酸血症、腔隙性脑梗死病史。患者因病情加重,持 续高热不退,于1月18日转入ICU,予以抗感染及对症支持治疗。1月22日10时16分患者呼吸停止,心率逐渐减慢,10时52分宣告临床死亡。

#### Translation

17. Zhan XX, male, 84 years old. The patient was admitted to the City Fifth Hospital at 17:4 on January 9, 2020 due to fever, cough, and gasping for 3 days. Past history of chronic bronchitis, unstable angina, coronary stenting, hypertension, gastrointestinal bleeding, renal insufficiency, hyperlipidemia, hyperuricemia, lacunar infarction. The patient was transferred to the ICU on January 18 due to the worsening of his illness and continued high fever, and was given anti-infection and symptomatic supportive treatment. At 10:16 on January 22, the patient stopped breathing and his heart rate gradually slowed down. At 10:52, he was declared clinically dead.

Additional information about this case:

Discussion of this case:

# DRASTIC073 - Liu De Yuan clinic owner - Not finished adding case details

Age&Sex 72M Chinese name 刘德炎 Name Deyuan Liu

Type Owner of Clinic near Huanan Market

Wet market -

Onset 2019-12-20 1st Admission 2020-01-01

Discharged Death Y
Hospital Dec 31st -

Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16 2019-12-17 2019-12-18 2019-12-19

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2019-12-20
                   Symptom onset
2019-12-21
2019-12-22
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2019-12-27
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2019-12-29
2019-12-30
2019-12-31
2020-01-01
2020-01-02
2020-01-03
2020-01-04
                   Red cross
2020-01-05
                   Wuhan pulmonary hospital
2020-01-06
2020-01-07
2020-01-08
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2020-01-11
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2020-01-21
2020-01-22
2020-01-23
2020-01-24
2020-01-25
2020-01-26
2020-01-27
2020-01-28
2020-01-29
                   Died.
2020-01-30
2020-01-31
check
```

Liu De Yuan's clinic

Nurse Chen? A xiao li

## References for the above summary:

https://info.51.ca/news/china/2021-02/969598.html

Archived:

https://archive.vn/ITFkY

 $\underline{\text{https://web.archive.org/web/20211206232905/https://info.51.ca/news/china/2021-02/969598.html}$ 

On December 20, 2019, Liu Deyan had a low-grade fever. He thought it was just a common cold, so he didn't have any injections and only took roxithromycin to reduce fever.

On January 1, 2020, at 1:00 a.m., Liu Deyan and his wife came to the Houhu District of Wuhan Central Hospital. Since December 15, 2019, multiple cases of pneumonia of unknown cause have been admitted to the two campuses of this hospital.

There was no nucleic acid test in Wuhan Central Hospital at that time. Liu Deyan had a CT scan, and the doctor found that his lungs were white and scattered, but there were no more beds in the Houhu hospital area. At 4 am, the couple called 120 and went to Jinyintan Hospital.

In Aunt Chen's memory, Jinyintan Hospital said at the beginning that they could not accept it. They waited in the aisle for four or five hours, and the doors and windows of the aisle were open at night, "It's so cold, so cold."

After 9 o'clock in the morning, the hospital said that the director agreed to accept it. A nurse took them to the sixth floor, where a new ward was opened, but the doctor said it could not be accommodated there and asked them to go to the third floor.

The couple went back, but Liu Deyan was still a little worried and wanted to go to the hospital. On January 2, 2020, they rushed to Wuhan Red Cross Hospital, which is a second-class hospital close to the clinic. The hospital said that it really has no ability to treat and dare not accept it. They rushed to Jinyintan Hospital again, and the hospital said they could not accept it without expert certification.

Under the contact and request of Xiao Li, on the afternoon of January 4, 2020, Liu Deyan was finally admitted to the Wuhan Red Cross Hospital.

When he was transferred to the hospital on the evening of January 6, 2020, Liu Deyan was still in good spirits and even wore pants. He fell into a coma on the way to the hospital and was sent to Wuhan Pulmonary Hospital after 11 o'clock at night.

(A bit confusing, apparently on Jan 1 and Jan 2 they went to Central (Houhu), Jinyintan two times, Red cross, Tongji, trying to be admitted, but refused everytime)

Caixin Original: https://china.caixin.com/2020-04-07/101539697.html

Archived: https://archive.vn/ODg7U

https://web.archive.org/web/20200408141054/http://china.caixin.com/2020-04-

07/101539697.html

## Additional information about this case:

## Clinic business:

See <u>section about his clinic</u> for more details <u>https://archive.vn/6jAeO</u>

## Photos of Dr Liu:



 $\frac{\text{https://xueqiu.com/5910030104/146608630}}{\text{https://xw.qq.com/cmsid/20200411a0pnr800}} \\$ 

## Discussion of this case:

# DRASTIC074

Age&Sex 66M3 Chinese name -Name -

Type works in Wuhan

Wet market

Onset 2019-12-29 1st Admission 2020-01-07 Discharged -

Death Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU

Other	-
Genbank	-
GISAID	-
GW	-
NMDC	-
CNGB	-
BioProject	-
SRP/CRA	-
SRR/CRR	-
SAM	-
Notes	
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
2019-12-05	-
2019-12-06	-
2019-12-07	-
2019-12-08	-
2019-12-09	-
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2019-12-26	-
2019-12-27	-
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2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-

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2020-01-06
2020-01-07
                  Zhoukou City
2020-01-08
                   Zhoukou City
                   Zhoukou City
2020-01-09
                   Zhengzhou
2020-01-10
                   Zhengzhou
2020-01-11
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                   Zhengzhou
2020-01-14
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2020-01-26
2020-01-27
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2020-01-29
2020-01-30
2020-01-31
check
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Commented [19]: As of source report date, still in hospital. No discharge mentioned.

Linked cases:

References for the above summary:

Beijing News - First case in Zhengzhou City, Henan Province <a href="https://archive.fo/4gTGK">https://archive.fo/4gTGK</a>

http://henan.china.com.cn/news/2020-01/21/content 41042336.htm

The patient is a 66-year-old male from Zhoukou Taikang. He works in Wuhan. He developed fever, chest tightness and shortness of breath on December 29, 2019. He returned to Zhoukou City on January 7, 2020 for treatment. He was transferred to Zhengzhou on January 10, and the patient was transferred to a designated hospital for isolation and treatment on January 20. The samples from the case were collected by the Provincial Center for Disease Control and Prevention for testing, and the results were weakly positive for the new coronavirus nucleic acid, and the specimens were sent to the China Centers for Disease Control and Prevention for viral nucleic acid review testing. On January 21, the China Centers for Disease Control and Prevention confirmed the results of the viral nucleic acid review testing. If it is positive, the diagnosis team of the National Health Commission's Epidemic Leading Group evaluated the case and confirmed it as a confirmed case of pneumonia infected by the new coronavirus. The patient is currently being treated in isolation and is in stable condition.

Additional information about this case:

Discussion of this case:

# DRASTIC076 Beijing-01

First Beijing patient, had HIV, pharmacist

Age&Sex 51M4
Chinese name XXX
Name XX X
Type Positive

Wet market Pharmacist (near) the entrance of the market

Onset 2019-12-17 1st Admission 2019-12-27

Discharged Death Hospital Dec 31st Lineage B
Cluster -

ICU JYT WIV IPBCAMS-WHHBCDC-HB- WH IME-WH IVDC WH190 WHU -

 Other
 Beijing-01

 Genbank
 MT034054

 GISAID
 EPI\_ISL\_514752

GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14 2019-12-15 2019-12-16

2019-12-17 Quit Wuhan to Beijing

2019-12-18 2019-12-19 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 -

2019-12-25	-
2019-12-26	-
2019-12-27	Admission
2019-12-28	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
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2020-01-24	-
2020-01-25	-
2020-01-26	-
2020-01-27	-
2020-01-28	-
2020-01-29	-
2020-01-30	-
2020-01-31	-
check	-

The Gisaid and Genbank sequences Beijing-01 are said to be collected on Jan 3 and uploaded on 2020-02-09. The Genbank was released only in August, probably so was the Gisaid sequence.

From a Chinese thesis, 24 June 2020

https://mega.nz/file/H6QGkZ7L#368vNf7sjbbjlB-xTSz2lYqUmJyUjV2p3wTRc3q-SrE (chinese original) (chinese

海军军医大学 博士学位论文

重要新发传染病(SFTS 和 COVID-19 等)的 流行病学、临床以及病毒基因进化特征

Epidemiological, clinical and viral evolutionary characteristics of important emerging infectious diseases

(SFTS and COVID-19)

#### Attempted full translation of the part II there

 $\frac{https://docs.google.com/document/d/1FRvFae8oAgvSMmWT6g57SVsD06jGz9B61UApShrhoM}{4/edit\#heading=h.rhn7i6c1rxfq}$ 

#### Excerpts

p.71

- (1) Epidemiological and clinical characteristics of COVID-19 patients in Beijing
- 1. Epidemiological characteristics

A total of 55 patients diagnosed by nucleic acid diagnosis were included in this study. The first patient in the study was a

51-year-old male pharmacist who ran a pharmacy at the entrance of the Huanan Seafood Market in Wuhan. The patient developed fever symptoms after returning to Beijing on December 17, 2019, and was admitted to the hospital for treatment on December 27, and was diagnosed with novel coronavirus pneumonia on January 4, 2020.

p.77

The first patient described in the previous article, a 51-year-old male Wuhan pharmacist, was diagnosed with acquired immunodeficiency syndrome (AIDS) and chronic hepatitis B on September 9, 2010, and was taking zidovudine (zidovudine), lamivudine (lamivudine) and efavirenz (efavirenz) and other antiviral

drugs for treatment. In the early stage of the epidemic, he developed fever symptoms on December 17, 2019, and was diagnosed with

novel coronavirus pneumonia combined with type I respiratory failure on January 4, 2020. Subsequently,the antiviral regimen for this patient was replaced with tenofovir, lamivudine, and lopinavir/ritonavir. After changing the

treatment regimen, the patient returned to stable condition and was finally discharged on February 5, 2020.

# DRASTIC077

Age&Sex 63M
Chinese name 的熊远富
Name Xiong Yuanfu
Type Positive

Wet market No. He may be a health worker

Onset End of december 1st Admission 2019-12-29

1st Admission Discharged Yes Death No Hospital Dec 31st No. 1 Lineage Cluster ICU JYT WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank

NMDC CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-20 2019-12-21 2019-12-22 2019-12-23 2019-12-24 -

2019-12-25 2019-12-26

GISAID GW

2019-12-27	-
2019-12-28	-
2019-12-29	No. 1
2019-12-30	No. 1
2019-12-31	No. 1
2020-01-01	Union
2020-01-02	Jinyintan
2020-01-03	Jinyintan
2020-01-04	Jinyintan
2020-01-05	Jinyintan
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan

#### https://baijiahao.baidu.com/s?id=1656697733426764116&wfr=spider&for=pc

Last New Year's Eve, 63-year-old Xiong Yuanfu and his patients spent an "unforgettable New Year's 30" in Wuhan Jinvintan Hospital. The medical staff, wearing heavy protective clothing. brought lunch boxes and dumplings to the hospital bed one by one, as well as an apple symbolizing safety. At the end of December 2019, Xiong Yuanfu found that he had some cold symptoms. He was a soldier who thought he was in good health and didn't care at first. On December 29, he had fever, headache, and elevated blood pressure... A series of symptoms made Xiong Yuanfu not dare to be careless. He went to the emergency department of Wuhan No. 1 Hospital for three consecutive days of infusions, but his condition did not improve. At this time, Xiong Yuanfu did not know that a pneumonia called "new coronavirus infection" was spreading in Wuhan. On New Year's Day 2020, Xiong Yuanfu spent in Wuhan Union Hospital. On the second day of hospitalization, he was suspected of contracting new pneumonia through lung CT examinations and viral nucleic acid tests. On the evening of January 2, Xiong Yuanfu was admitted to Wuhan Jinyintan Hospital, a designated hospital specializing in the treatment of new pneumonia. After that, Xiong Yuanfu's condition deteriorated sharply. The high fever left him exhausted and had no appetite at all. Even though he was conscious, he was groggy all day. "I've been in bed for more than 20 days, and the nurses are taking care of me when I eat, drink, and lax. Without them, I would definitely not be able to get through this." Recently, Xiong Yuanfu, who had improved slightly, told reporters on the phone that the medical staff took good care of him and gave him gave him the courage to live. Speaking of emotion, the resolute veteran choked several times. "I'm an old man in his 60s. He has to take care of his bowels and bowels on the bed. Most of the nurses in the ward are little girls and young men in their 20s. You say how embarrassed I am." Xiong Yuanfu told reporters that once he was really embarrassed Unable to bear, I called the nurse for help. The young nurse neatly handled the filth for him, and before leaving, she said, "It's alright, you can call me anytime when you need it." After his condition improved, Xiong Yuanfu saw a lot of news about new pneumonia through his mobile phone and TV news. He, who has never been to the Huanan Seafood Wholesale

Market, has always wondered how he contracted the virus. "Could it be that the subway lines and buses I often take pass near the market and share the same car with the patients there?"

#### https://www.sohu.com/a/368879338 123753

63-year-old Xiong Yuanfu is a new type of pneumonia patient hospitalized in Jinyintan Hospital. He told reporters on the phone that the careful care of the young medical staff gave him the courage to live. Speaking of emotion, the resolute veteran choked several times.

### DRASTIC078

Age&Sex 31F2
Chinese name 吴静
Name Wu Jing
Type Positive
Wet market No
Onset 2019-12-27

Onset 2019-12-27 1st Admission 2019-12-31 Discharged -

Death Hospital Dec 31st Lineage Cluster **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank GISAID GW NMDC **CNGB BioProject** SRP/CRA

SRR/CRR

SAM	-
Notes	-
2019-12-01	-
2019-12-02	-
2019-12-03	-
2019-12-04	-
2019-12-05	-
2019-12-06	-
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2019-12-28	-
2019-12-29	-
2019-12-30	-
2019-12-31	Puren
2020-01-01	Puren
2020-01-02	Puren
2020-01-03	Puren
2020-01-04	Tongji
2020-01-05	Tongji
2020-01-06	Jinyintan
2020-01-07	Jinyintan
2020-01-08	Jinyintan
2020-01-09	Jinyintan
2020-01-10	Jinyintan
	,

#### https://www.sohu.com/a/388966809 139908

Wu Jing is a medical staff in a tertiary hospital in Qingshan District, Wuhan, and has no history of contact with the South China Seafood Market. On December 27 last year, she developed a high fever above 38°C. On December 31, she was admitted to Wuhan Puren Hospital. On January 4, she had difficulty breathing and was transferred to Tongji Hospital, and then to Jinyintan Hospital for treatment. She stayed in the ICU ward of Jinyintan Hospital for more than a month, was put on a non-invasive ventilator assisted by an oxygen mask, and was transferred to the general ward on February 12. On February 19, after the CT and nucleic acid tests were negative, Wu Jing received her discharge report: CT showed severe infectious lesions in both lungs, consolidation and bronchiectasis in the middle lobe of the right lung, which were caused by the damage to the lung structure by the virus. Bullae. Before leaving the hospital, the doctor told her that she might need to continue oxygen therapy after returning home.

According to the leaked table from a Feb 4 Wuhan CDC meeting in <a href="https://archive.ph/NLcQ1">https://archive.ph/NLcQ1</a> There is a HCW in Wuhan No.1 hospital with onset on Dec 27.

But No.1 hospital isn't in Qingshan District (in contrary to Puren and Iron&Steel) so it doesn't match with 31F2.

### DRASTIC079

Age&Sex 53M
Chinese name 胡安平
Name Hu Anping
Type Positive

Wet market No, worker in Huanggang, Hubei

Onset End of december

1st Admission

Discharged 2020-01-28

Death No
Hospital Dec 31st ?
Lineage Cluster ICU JYT WIV IPBCAMS-WHHBCDC-HBWH IME-WH IVDC -

WH190

WHU	-
Other	-
Genbank	-
GISAID	-
GW	-
NMDC	-
CNGB	-
BioProject	-
SRP/CRA	-
SRR/CRR	-
SAM	-
Notes	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	Huanggang Central Hospital
2020-01-03	Huanggang Central Hospital
2020-01-04	Huanggang Central Hospital
2020-01-05	Zhongnan
2020-01-06	Zhongnan
2020-01-07	Zhongnan (ICU)
2020-01-08	Zhongnan
2020-01-09	Zhongnan
2020-01-10	Zhongnan

#### http://jhsjtxx.com/news/1066831.html

### https://www.sohu.com/a/372865062\_375839

Hu Anping, 53, is from Huanggang, Hubei, and runs a poultry business in the Huanggang vegetable market. At the end of December last year, he was diagnosed as a severe pneumonia patient with a new type of coronavirus infection and was admitted to the intensive care unit of Wuhan University Zhongnan Hospital. On January 28, he was officially discharged from the hospital. Previous reports said he was the first critically ill patient to be discharged from the Wuhan epidemic.

At the end of December 2019, I developed symptoms of a cold, and I had chills all over my body, and I had to cover three quilts at home. Because I usually have good physical fitness, but a little high blood pressure. At that time, I was still busy at home, so I didn't go to the hospital right away. It took a few days for me to feel more and more uncomfortable, so I went to Huanggang Central Hospital. At that time, the CT scan showed that it was already pneumonia, and there was a shadow in the right lung, and he was hospitalized that day. After two days of injections in the hospital, I went to take a film on the third day, and my left lung was also infected. The attending doctor called my wife over and said that my condition was a bit serious, and I was going to issue a "serious illness notice" for my family to sign. My wife was very nervous at the time, because a few years ago, a relative in my family suffered from kidney failure due to continuous high fever. So we discussed transferring to Wuhan for treatment. At 4:00 p.m. on January 5, the Central Hospital contacted an ambulance and took me to Wuhan Zhongnan Hospital.

When I arrived in Wuhan, several large hospitals in Wuhan were already full of patients. There are also many patients in Zhongnan Hospital. In fact, before I went to Wuhan, I knew that the Huanan Seafood Market was closed and someone was infected. I was running a poultry business in Huanggang. Although I haven't been to the Huanan Seafood Market in person, most of the seafood in the market is purchased from South China. I don't know how I got infected. I didn't know what the disease was at the time, only that it affected the lungs. After being transferred to Wuhan, he was also treated according to the diagnosis and treatment of pneumonia. Later, the doctor told me that I had "new type of coronavirus pneumonia". I was one of the first people to get sick. At that time, I didn't know how to treat it or what medicine to use.

### DRASTIC080

Age&Sex 56M

Chinese name 許世慶

Name Xu Shiqing
Type Positive
Wet market No

Onset 2019-12-27

1st Admission

Discharged 2020-02-16

Death No
Hospital Dec 31st Lineage Cluster ICU JYT WIV IPBCAMS-WHHBCDC-HB- -

WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW **NMDC CNGB BioProject** SRP/CRA SRR/CRR SAM Notes 2019-12-27 2019-12-28 2019-12-29 2019-12-30 2019-12-31 2020-01-01 2020-01-02 2020-01-03 2020-01-04 Wuhan pulmonary hospital 2020-01-05 Wuhan pulmonary hospital 2020-01-06 Wuhan pulmonary hospital 2020-01-07 Wuhan pulmonary hospital 2020-01-08 Zhongnan

Zhongnan

Zhongnan

#### https://archive.ph/a9bnp

2020-01-09

2020-01-10

56-year-old Xu Shiqing is the longest hospitalized patient with new coronary pneumonia in Wuhan Pulmonary Hospital. After more than a month of treatment, he was cured and discharged on February 16. Xu Shiqing has always been healthy. In December last year, he went to a KTV near the Huanan Seafood Wholesale Market to sing four times. On December 27, he began to feel cold and unwell. On January 4 this year, he began to have a high fever. He was admitted to the Wuhan Pulmonary Hospital that night and experienced difficulty breathing for the first time in his life. For the next 10 days, he fell into a daily cycle of high fever and fever reduction. After two weeks of high-flow oxygen therapy and antiviral therapy, Xu Shiqing's health began to improve. No matter how bad his appetite is, he will try his best to eat up the nutritious meals carefully matched by the hospital.

### DRASTIC081

Age&Sex 47M2 者王平 Chinese name Name Wang Ping Positive Type Wet market Worker Onset 2020-01-01 1st Admission 2020-01-07 2020-01-27 Discharged

Death N
Hospital Dec 31st
Lineage Cluster ICU JYT WIV IPBCAMS-WH-

HBCDC-HB- Jingzhou/HBCDC-HB-01/2020

 WH

 IME-WH

 IVDC

 WH190

 WHU

 Other

 Genbank

GISAID EPI\_ISL\_412459

GW -

NMDC NMDC60013089-01

CNGB BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-27 2019-12-28 -

2019-12-29 2019-12-30 2019-12-31 2020-01-01 Clinic 2020-01-02 2020-01-03 2020-01-04 Red Cross 2020-01-05 2020-01-06 Other Clinic

2020-01-07 Jingzhou Chest Hospital

### https://ngdc.cncb.ac.cn/ncov/genome/accession?q=EPI\_ISL\_412459

Collected on Jan 8. Gisaid says 47M and collected by Jingzhou Center for Disease Control and Prevention.

On the press he is often said to be 46M.

#### https://www.bjnews.com.cn/detail/158011444315457.html

According to the People's Daily, the patient had previously worked in handling at the Huanan Seafood Wholesale Market in Wuhan. On January 7, due to symptoms such as fever, headache, and fatigue, he was referred to the outpatient department of Jingzhou Chest Hospital and was diagnosed with pneumonia caused by a new type of coronavirus. After symptomatic treatment, he recovered and was discharged from the hospital today.

As well as

#### https://mp.weixin.qq.com/s/rlq3hIMQ24Ch7oJnSuI4BQ

I felt the symptoms on the day when the Huanan Seafood Market in Wuhan was closed (January 1), and I felt a little pain all over my body. I was still working that morning, and when the seafood market was closed, I followed the boss to another seafood market in Hankou, the "Sijimei Market" to sell fish. In the afternoon, I felt sick and thought it was a cold, so I went to a small clinic for an injection. continue to go to work. After two days, I felt chest tightness and started to have a fever. The fever reached 38 degrees 5. I still went to a small clinic to take a fever-reducing injection. After one injection, the temperature dropped a little, and it dropped to more than 37 degrees, but the fever would return after half a day. On January 4th, I read the news that many people in the Huanan Seafood Market had contracted the new type of coronavirus pneumonia and were sent to Jinyintan Hospital. I was a little worried about myself, so I went to Wuhan Red Cross Hospital (the 11th Hospital) to do it. After an examination, blood was drawn, and a picture of the lungs was taken, the doctor read the picture and said that I had no signs of the new virus. They didn't ask me about my work experience in the Huanan Seafood Market. At that time, everyone didn't pay attention to this matter. Who knew it would be so serious? Wuhan just closed the seafood market. The hospital said I was fine, so I left, went to the market in the morning to go to work as usual, and continued to infuse fluids in the small clinic in the afternoon. After two days of losing, I still didn't get better. On January 6th, I changed a clinic. The doctor gave me two injections, but I had a high fever of 39 degrees at the time, so I said, your injections are useless. He asked about my symptoms. I said chest tightness and high fever. He said that I was similar to those in Jinyintan Hospital who had pneumonia. I said that I had done an examination and showed him the film. He also said, from the film, I am not that one. Symptoms, but he thought I might be another virus, and suggested that I go back to my hometown of Jingzhou to see it, and I could be reimbursed. At 2:30 p.m. on January 7th, I went to Jingzhou Chest Hospital and told them directly that I came from the Huanan Seafood Market. The doctor wearing a mask was surprised when he heard it, and immediately went to put on clothes (isolation suit), and after ten minutes, he isolated me and locked me in a room.

In the face of a severe epidemic, hope is precious. The "People" reporter interviewed Wang Ping, the first and only cured patient in Jingzhou, and Liu Changhua, his doctor and director of the Department of Infectious Diseases of Jingzhou Chest Hospital. Wang Ping, 46, worked at the Huanan Seafood Market in Wuhan for four years. After contracting the virus, he was on the verge of an extremely dangerous situation. From his remarks, we can see that he did not encounter the difficulties of diagnosis and the overload of the medical system in Hubei. Before most people's alertness to the epidemic had not been awakened, he received a proper diagnosis and no cost. Treatment, he was lucky.

#### Video:

https://weibo.com/2867360410/IrxF1aDVI?refer flag=1001030103

### DRASTIC082

 Age&Sex
 62F3

 Chinese name
 XXX

 Name
 Shen X

 Type
 Positive

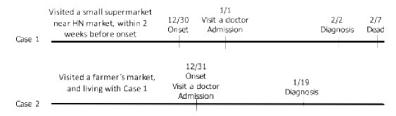
 Wet market
 No

 CN-WHO
 7.1

Onset 2019-12-30 1st Admission 2020-01-01

Death Y

Cluster 7: There were two confirmed cases, living together as husband and wife. None of them had links with Huanan Market. Both of them denied animal contact history and travel history. Spouse one, 62 year old, fell ill on 30 December 2019; Min X, male, 70 years old, fell ill on 31 December 2019. Shen had visited a small supermarket near Huanan Market, and Min had visited a market at Changgang Road.



Possible source of infection: might be infected from supermarket environmental exposure or community exposure, and spouse two might be infected from market environmental exposure or human-to-human transmission or community exposure.

### DRASTIC083

70M Age&Sex Chinese name XXXName Min X Type Positive Wet market No **CN-WHO** 7.2 Onset 2019-12-31 1st Admission 2019-12-31 Cluster 7: There were two confirmed cases, living together as husband and wife. None of them had links with Huanan Market. Both of them denied animal contact history and travel history. Spouse one, 62 year old, fell ill on 30 December 2019; Min X, male, 70 years old, fell ill on 31 December 2019. Shen had visited a small supermarket near Huanan Market, and Min had visited a market at Changgang Road.



Possible source of infection: might be infected from supermarket environmental exposure or community exposure, and spouse two might be infected from market environmental exposure or human-to-human transmission or community exposure.

### DRASTIC084

 Age&Sex
 70U1

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 No

 CN-WHO
 6.1

Onset 2019-12-26 1st Admission 2020-01-03 <u>Cluster 6:</u> There were two clinically diagnosed cases, living together as husband and wife. Both of them denied exposure to the Huanan Market, confirmed exposure to Yangchahu market and the Gusaoshu market, denied animal contact history, and denied exposure history of travel. Spouse one, 70 years old, fell ill on 26 December 2019; Spouse two, 70 years old, fell ill on 28 December 2019.



Possible source of infection: Spouse one might be infected from market environmental exposure or community exposure, and Spouse two might be infected from market environmental exposure or human to-human transmission or community exposure.

### DRASTIC085

 Age&Sex
 70U2

 Chinese name
 XXX

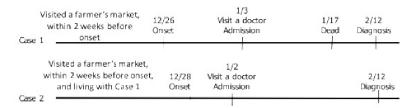
 Name
 XX X

 Type
 Positive

 Wet market
 No

 CN-WHO
 6.2

Onset 2019-12-28 1st Admission 2020-01-02 <u>Cluster 6:</u> There were two clinically diagnosed cases, living together as husband and wife. Both of them denied exposure to the Huanan Market, confirmed exposure to Yangchahu market and the Gusaoshu market, denied animal contact history, and denied exposure history of travel. Spouse one, 70 years old, fell ill on 26 December 2019; Spouse two, 70 years old, fell ill on 28 December 2019.



Possible source of infection: Spouse one might be infected from market environmental exposure or community exposure, and Spouse two might be infected from market environmental exposure or human to-human transmission or community exposure.

### DRASTIC086

Age&Sex92MChinese nameXXXNameXX XTypePositiveWet marketNo

CN-WHO

Onset ?

1st Admission before 2020-01-03

2020-01-03 Zhongnan

 $\underline{\text{https://matters.news/@Trojanwar123/\%E8\%BD\%AC\%E8\%BD\%BD\%E5\%88\%A0\%E6\%96\%87}$ 

%E4%BB%96%E4%BB%AC%E6%89%93%E6%BB%A1%E5%85%A8%E5%9C%BA-bafyreicljzg7xsrgy5tekp7xdvfy5ogg2mbfi2jkpmltfamuz3majgu634

At the same time, Zhongnan Hospital stepped up screening efforts, and three more suspected cases were found on January 3. According to Wang Xinghuan, this is a family clustered case. The 92-year-old father who was hospitalized in the neurology department was the first to develop the disease. His son and daughter-in-law were also hospitalized one after another. The symptoms of the three were similar to those of the unexplained pneumonia case, but none of them had Huanan seafood Market exposure history, SARS kit test also showed positive. "These three

people were contagious, and most importantly, none of them had an epidemiological history related to the Huanan Seafood Market, so we judged that the disease would definitely be transmitted from person to person."

### DRASTIC087

 Age&Sex
 40sU

 Chinese name
 XXX

 Name
 XX X

 Type
 Positive

 Wet market
 Yes

CN-WHO

Onset ?

1st Admission 2019-12-26

2019-12-26 Iron and steel general hospital (WISCO)

2020-01-02 Jinyintan

#### https://yyh.dxy.cn/specials/newpneumonia/article/678531

Same interview, transcript slightly different

"he is quite young, just a little over 40 years old."

https://caifuhao.eastmoney.com/news/20200206150540949232620

Li Xin, director of the Department of Respiratory and Critical Care Medicine of China Resources Wuhan Iron and Steel General Hospital, raised the CT imaging film in his hand and was very surprised: "Why is the lung condition so serious." This day is December 26, 2019.

: It was really unexpected at that time. I remember that on December 26, 2019, a patient was admitted. My doctor showed me a CT imaging film, and the lungs did look heavy. The patient had been treated for several days because of fever, and his body temperature had not dropped significantly. We were also quite puzzled. After all, he was still quite young, only in his forties, so his recovery would not be so slow. About a few days later, we received a call from the Health and Health Commission. At that time, it did not directly say that it was related to the Huanan Seafood Market, but only said that there was such a type of viral pneumonia that was related to the Huanan Seafood Market. Tell us like this, for unknown reasons. We asked about the patient's activity trajectory, and it turned out that he really had contact with the Huanan Seafood Market. His family opened a restaurant, and he went to the seafood market to buy goods. This is the first case we have contact with.

I don't remember the specific time point. This patient was admitted to the hospital on December 26. After staying here for a week, he was transferred to a designated hospital. More and more patients related to the Huanan Seafood Market began to spread in the society, saying that SARS may have reappeared, and his family was also very nervous and had to be transferred to

a designated hospital, so we helped to contact Wuhan Jinyintan Hospital and transferred to the hospital. .

### **DRASTICO MORE**

There are some missing cases from cluster 5, 6 and 7 in the WHO annexes. Including one more 57U.

Edit: I added those patients recently, babar.

### A20

Stall West 5th 15,17 <a href="https://www.zhipin.com/gongsis/0c32ecc9fe10bbc0i3V73t60E1tSyw~~.html">https://www.zhipin.com/gongsis/0c32ecc9fe10bbc0i3V73t60E1tSyw~~.html</a> 3 positive environmental sequences (A18 A20 A2) found by the China CDC on Jan 1, so there was obviously an early case there.

Spike and N-gene partial sequences obtained before February 2020.

https://www.epochtimes.com/gb/20/5/31/n12150755.htm

A20	15, 17 Seventh Street, West End	glove	+	+(99%)	+(99%)	NA
A18	15, 17 Seventh Street, West End	Sole of Shoe Cover	+	NA	NA	NA
A2	15, 17 Seventh Street, West End	surface of the earth	+	+(99%)	NA	NA

Partial sequences available at <a href="https://twitter.com/coroldo1/status/1414272236492509186">https://twitter.com/coroldo1/status/1414272236492509186</a>

One sample, A20, has been sequenced latter and is said to be lineage A in the Frebruary 2022 China CDC preprint

https://assets.researchsquare.com/files/rs-1370392/v1 covered.pdf?c=1645813311

The stall can be seen in a July 2019 video <a href="https://youtu.be/-c0iOjGjwsk?t=192">https://youtu.be/-c0iOjGjwsk?t=192</a>



His stall appear in a Koopmans' map with 8 early cases

# Info about places etc:

Some maps <a href="http://babarlelephant.free-hoster.net/caseMap/">https://babarlelephant.free-hoster.net/caseMap/</a>
<a href="https://www.google.com/maps/d/viewer?mid=1D12qtMmmH\_qrb57fUSVXd38KhMwd5kU-&ll=30.613024243157554%2C114.26498355732531&z=18">https://www.google.com/maps/d/viewer?mid=1D12qtMmmH\_qrb57fUSVXd38KhMwd5kU-&ll=30.613024243157554%2C114.26498355732531&z=18</a>

# Puren hospital

South of the river, close to the river, Qingshan district, known for admitting 61M the first death, see DRASTIC043 Zeng.

# Wuhan Iron and Steel General Hospital

South of the river, 1km East of Puren

https://caifuhao.eastmoney.com/news/20200206150540949232620

Li Xin stories (director of respiratory department)

First patient admitted on Dec 26, who stayed 1 week and then transferred to Jinyintan.

"In his 40s (...) his family opened a restaurant, and he went to the seafood market to buy goods. This is the first case we have contact with."

# Red cross hospital

Caixin, the 3rd whistleblower Dr. Liu Wen https://archive.ph/P7FAA

#### https://www.redcross.org.cn/html/2020-02/67372.html

On December 18, 2019, a month before Wuhan issued the "City Closure Order", the Wuhan Red Cross Hospital, which is 1.5 kilometers away from the Huanan Seafood Market, received its first patient with new coronary pneumonia. On January 5, the Wuhan CDC reported 59 confirmed cases of "pneumonia of unknown cause", of which 10 were admitted to the Wuhan Red Cross Hospital.

#### http://www.xinhuanet.com/politics/2020-04/10/c 1125835363.htm

Xiong Nian said that in retrospect, the wholesaler from the Huanan Seafood Market who came to see the doctor on December 17, 2019 was like the "first domino" that fell. In the days that followed, fever patients kept pouring in, and information such as more than 300 people a day, patients with "ground-glass CT-like lungs", and contact history with the South China Seafood Market were gathered to him one after another.

According to the nucleic acid test results, on January 5, the Wuhan Red Cross Hospital reported 10 confirmed cases to the Wuhan Municipal Health and Health Commission, which were also the first batch of patients confirmed by the Wuhan nucleic acid test. At that time, 59 confirmed cases were reported in the city.

In mid-January, a 10-year-old patient in the oncology department on the 10th floor of the inpatient department passed away. Both lungs were completely white when he died. The entire oncology staff were infected, including 12 doctors and 14 nurses.

#### http://m.cyol.com/content/2020-03/29/content\_18540787.htm

From December 17 last year, Zhang Liqiong's respiratory department admitted the first patient with new coronary pneumonia to this day

#### https://new.gg.com/omn/20200313/20200313A0HB6C00.html

Every autumn and winter, Fan Zhongjie would come into contact with flu patients from the Huanan Seafood Market, but he did not expect that the Red Cross Hospital had entered into such a long "war" since he admitted the wholesaler on December 17 last year. He remembered that the patient had fever, cough, chest tightness, and ground-glass opacities in the lungs on CT examination. He was treated in the hospital for about 10 days, and was first transferred to Tongji Hospital, and then to Jinyintan Hospital. In the meantime, two more patients with the same symptoms came to the hospital, both from the Huanan Seafood Market. One was a small boss and the other was a part-time worker. Because he participated in the treatment of SARS in 2003, Fan Zhongjie was particularly sensitive and vigilant to these three cases of pneumonia of unknown cause. He speculated that it was viral pneumonia and reported to the hospital leaders.

Fan Zhongjie said that on December 27, the leaders reported the unexplained pneumonia cases to the Jianghan District Center for Disease Control and Health and the Jianghan District Health and Health Commission, and then the information received was the same as that of many hospitals in Wuhan

# Tongji hospital

#### https://m.thepaper.cn/baijiahao 6716622

On December 27, 2019, Wuhan Tongji Hospital first discovered the case and quarantined the patient; on December 28, 2019, the epidemic situation was urgently reported to the CDC; on December 29, 2019, the CDC took samples; December 2019 On the 30th, the confirmed patients were transferred to designated hospitals.

In the <u>WHO report p.50</u>, large scale retrospective search of cases have been conducted in Tongji, all negative.

Study 1. Tongji Hospital. Between July and December 2019, 2074 samples were collected; these included 2058 plasma samples, 10 stool samples and six serum samples.

Study 2. Tongji and other hospitals. Some 2334 throat swabs, the majority from children collected between 1 October and 31 December 2019 from four branches of Tongji Hospital (Wuhan Tongji Hospital, the Optics Valley branch, the Sino-French New City branch, and the Children's Hospital) were tested by NAT for SARS-CoV-2 (Da'an Gene Novel Coronavirus 2019-nCoV Nucleic Acid Detection Kit).

#### https://news.sina.com.cn/o/2020-01-22/doc-iihnzahk5751758.shtml

A new patient onset Dec 21, 39M3, who had "NGS detection of pathogenic microorganisms" on Dec 26, transferred to Jinyintan on Dec 31. Unpublished sequence ?

A Dec 30 Weibo post

"It was reported on the Internet that Wuhan Tongji Hospital confirmed that the pathogen was SARS coronavirus, but BGI did not dare to publish the report. (Picture taken from Weibo)" <a href="https://news.ltn.com.tw/news/world/breakingnews/3025267">https://news.ltn.com.tw/news/world/breakingnews/3025267</a>

See for a timeline of Wechat/Weibo posts <a href="https://www.bilibili.com/read/cv5970935">https://www.bilibili.com/read/cv5970935</a>

# Union hospital (Xiehe)

Unfortunately no doctor gave a detailed story

https://archive.ph/TfWcl#selection-3455.1-3455.66 WSJ article on Mrs Wei

http://www.hbql.gov.cn/view/3117.html

http://wjw.hubei.gov.cn/bmdt/ztzl/fkxxgzbdgrfyyq/yxdx/202003/t20200326 2191527.shtml

https://archive.ph/QnOKZ Caixin, the 2nd whistleblower Xie Linka

(From Caixin report) On December 30 at 20:48, Xie Linka, a doctor at the Cancer Center of Wuhan Union Medical College Hospital, posted a message in the WeChat group of the cancer center, "Don't go to the Huanan Seafood Market in the near future, it is happening there now. Many people have suffered from pneumonia of unknown cause (similar to SARS). Today, our hospital has treated many patients with pneumonia in the Huanan Seafood Market. Everyone pays attention to wearing masks and ventilating."

# Integrated (Xinhua, Zhong Jixian)

<u>Hubei Provincial Hospital of Integrated Traditional Chinese and Western Medicine, former Hubei</u> Xinhua Hospital

A lot of details thanks to Zhang Jixian

https://www.youtube.com/watch?v=jUHiQRJiOSQ full CTGN interview

https://news.cgtn.com/news/2020-04-19/How-were-the-first-cases-of-COVID-19-dealt-with-by-

Wuhan--PODH5c086c/index.html https://www.youtube.com/watch?v=U6zyYNT-RK0 relevant excerpt

https://www.youtube.com/watch?v=tqXvmWk-1W8

https://www.youtube.com/watch?v=IQH4zHX0\_aA

http://www.xinhuanet.com/politics/2020-04/20/c 1125878293.htm

Long interview with the Intellectuals

https://k.sina.cn/article 1409194012 53fe981c02700vwkb.html?wm=3049 0032

https://mp.weixin.qq.com/s/E\_FMh8T31ZnTFhi-5wZCbw

https://www.ccdi.gov.cn/lswh/renwu/202002/t20200207 210984.html

https://lujuba.cc/en/230540.html

https://archive.ph/kSXat#selection-1333.29-1337.30

VIdeo, recently found https://3g.163.com/v/video/VYO4G9UV1.html



https://news.dayoo.com/gzrbyc/202003/07/158752\_53178478.htm

Phone interview with Zhang Jixian

"For example, the place where the old couple lives (62M and 62F) is two bus stops at the South China Seafood Market."

# Youfu hospital

The closest to the market

Missed opportunity, small hospital cases neglected in the early days of the Covid-19 pandemic <a href="https://archive.ph/aZsuh#selection-481.127-481.241">https://archive.ph/aZsuh#selection-481.127-481.241</a>

# PLA hospital

The hospital building seems to be the one on the other side of the river.

Known for appearing in the BGI IVDC WH0x paper

#### https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736%2820%2930251-8.pdf

On gisaid the BGI sequences Wuhan/WH01 Wuhan/WH02 Wuhan/WH03 Wuhan/WH04 are said to be collected at PLA hospital, but it is not true (see 44M1 Wuhan/WH02 from Tongji, and 21F Wuhan/WH04 WHU02 from Zhongnan).

Up to a small expected offset, the GPS coordinates in the biosamples map Wuhan/WH01 (44M) and Wuhan/WH02 (43M) near Union, Wuhan/WH03 (21F) to Zhongnan and Wuhan/WH04 (39M2, lineage A) to PLA.

For the Dec 10 creation date of the ENA biosamples of WH01-WH04 see <a href="https://twitter.com/flodebarre/status/1512922773940809731?s=20&t=UGvfh57r36Gzle3LhLmPgg">https://twitter.com/flodebarre/status/1512922773940809731?s=20&t=UGvfh57r36Gzle3LhLmPgg</a>

From a Chinese paper focusing on Wuhan PLA hospital

https://mega.nz/file/2iJhxbKC#7Tc0l8rkaEgu6yJJjRH85pf0t0Kwlf5klXvhpVDMhNA

"From January 4, 2010 to February 24, 2010, the General Hospital of the Central War Zone of the Chinese People's Liberation Army admitted a total of 339 patients with confirmed COVID-19, including 13 deaths. The clinical manifestations, laboratory tests and causes of death of the 13 deaths are now reported"

# Zhongnan hospital

On the other side of the river

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7033720/ sequenced two December patients WHU01 (39F1) and WHU02 (21F)

#### https://zhuanlan.zhihu.com/p/148499268

Zhongnan Hospital, where two suspected cases were found yesterday, took samples of the pneumonia tank lotion for these two patients. On the same day, the samples were sent to a third-party testing agency, Wuhan Huada Medical Laboratory for gene sequencing. An employee of a gene sequencing company received a call from the Wuhan Health and Health Commission and told him: If a case sample of Wuhan pneumonia is received, it cannot be reexamined; the existing case samples must be destroyed, the sample information cannot be disclosed, and relevant information cannot be released to the public. Papers and related data, if you detect them in the future, be sure to report them to us.

Zhongnan article showing the same 52M as below, and talking about the 138 Zhongnan patients from Jan 1 to Jan 28 <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7042881/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7042881/</a>

Detailed doctor stories

https://matters.news/@Trojanwar123/%E8%BD%AC%E8%BD%BD%E5%88%A0%E6%96%87

=

%E6%AD%A6%E6%B1%89%E7%96%AB%E6%83%85%E4%B8%AD%E7%9A%84%E4%B8 %AD%E5%8D%97%E5%8C%BB%E9%99%A2-

%E4%BB%96%E4%BB%AC%E6%89%93%E6%BB%A1%E5%85%A8%E5%9C%BA-bafyreicljzg7xsrgy5tekp7xdvfy5ogg2mbfi2jkpmltfamuz3majgu634 (Caixin)

Long story. Includes a family cluster found on Jan 3 and SARS PCR kits that gave positive results on Jan 2

"On the same day, two suspected patients also tested positive for SARS. Cheng Zhenshun immediately reported the results to the hospital leadership, and the hospital immediately reported it to the Wuchang District Center for Disease Control and the Wuhan Municipal Health Commission. That afternoon, the Wuhan Municipal Health Commission sent three experts to Zhongnan Hospital for consultation. The two patients were then transferred to Jinyintan Hospital."

Director Professor Li Yirong purchased test kits. After the meeting, Li Yirong ordered two boxes of SARS detection reagents from Sun Yat-sen University Daan Gene Co., Ltd. (Daan Gene, 002030.SZ). Daan Gene is a biological product company dominated by molecular diagnostic technology. A person in charge of the company surnamed Zhang confirmed to Caixin reporters that on December 31, they sent three boxes of SARS detection kits to Wuhan, each with 24 people. , two boxes were sent to Wuhan University Zhongnan Hospital.

three more suspected cases were found on January 3. According to Wang Xinghuan, this is a family clustered case. The 92-year-old father who was hospitalized in the neurology department was the first to develop the disease. His son and daughter-in-law were also hospitalized one after another. The symptoms of the three were similar to those of the unexplained pneumonia case, but none of them had Huanan seafood. Market exposure history, SARS kit test also showed positive.

#### https://mp.weixin.qq.com/s/IIQyOfQtsyvpptPAITjwPg

Zhongnan article on recommandations, showing several late January severe patients CT scans <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7003341/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7003341/</a>

The 1st supplementary file details a 52M case admitted with severe Covid before Jan 5 (then ECMO) so onset in December. No exposure to the market, seafood vendor in Huanggang vegetable market.

#### http://www.xinhuanet.com/politics/2020-04/20/c 1125878289.htm

Zhang Xiaochun story, imaging department, mentions having seen Covid images on Dec 27-28 (of 21F and 39M1 admitted on Dec 25 and Dec 28 ?)

# Jinyintan hospital

Thelancet paper, 41 confirmed cases, 27 linked to the market <a href="https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext">https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext</a>

Zhang Dingyu interview, video

http://www.xinhuanet.com/politics/2020-02/01/c 1125517358.htm

[Oral Record] Zhang Dingyu: I am in the eye of the storm

https://www.weibo.com/ttarticle/p/show?id=2309404483446197059980

Story of the Director of Jinyintan, hospital specialized in infectious disease, where almost all confirmed patients got transferred between Dec27 and Jan 2.

They obtained the sequence of 65M on Dec 27 evening and shared it with the WIV. (Zhengli Shi partially confirmed this in an email, see <a href="https://justpaste.it/9dioa">https://justpaste.it/9dioa</a>)

http://www.xinhuanet.com/politics/2020-04/20/c 1125878292.htm

2nd Zhang Dingyu's interview 24 patients on Dec 31

https://web.archive.org/web/20210815223110/https://mp.weixin.qq.com/s?src=11&timestamp=1629066521&ver=3255&signature=8AfdIrsaQZAdP1GZvMrAlFks5GUwfk6yHvIU4-ZzwYesd-lg9xt3p6J0jWalPGAbK7EWLJM%2AVPpRts4zMjl68ZqFHHA5qWLKsXTHNWhAnsRydq5Vja5M5OO4xCq-OcAS&new=1

Zhang Dingyu

Who is this?

Wang Liwei (pseudonym) is the operator of the Huanan Seafood Market and one of the first seven infected persons. His wife and sister-in-law were also diagnosed with the new coronavirus in this outbreak.

http://www.bjnews.com.cn/detail/157793784214461.html

May be important: around Jan 1 some suspected cases were sent to Jinyintan for observation, living near the market, having a mild pneumonia.

Mapping the floors of Jinyintan



[Health News] Life and death Jinyintan

https://archive.ph/ygAz8#selection-95.0-100.0

Confirms Zhang Dingyu's story

(Following the 6/7 Integrated cases transferred on Dec 29)

On December 31, the last day of 2019, ambulances continued to roar into Jinyintan Hospital. Wuhan Tongji Hospital, Wuhan Union Hospital, Wuhan Central Hospital, and Wuhan Red Cross Hospital are still transferring "strange patients" to this infectious disease specialist hospital.

#### http://wjw.wuhan.gov.cn/ztzl 28/fk/fkdt/202004/t20200430 1197066.shtml

Story of Huang Chaolin.

Of note he was infected and hospitalized in late January

#### https://archive.ph/2hXyK

Centered on Jinyintan. Seems to mix several of the above stories

#### https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7135076/

Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study

Mentions the first two deaths  $61\mbox{M}$  and  $69\mbox{M2}$ 

# Central hospital (Nanjing road, Houhu district, Ai Fen)

Large hospital, high-ranked, produced 3 of the most important early genomes (65M, 41M accountant, 41M Wuhan-Hu-1).

Two buildings: Houhu district, 1.5km North of the market, and Nangjing road, 5km South and close to the river.

### Houhu district (Gusaoshu road)

The <u>Wuhan-Hu-1 preprint</u> (not the article) includes a patient table (market-linked, but only suspected, from Wuhan Central hospital)

Characteristic	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6	Patient 7
Age (Year)	41	44	42	70	31	51	43
Sex	M	F	M	F	M	M	M
Date of illness onset	Dec 20,2019	Dec 22,2019	Dec 24,2019	Dec 24,2019	Dec 21,2019	Dec 16,2109	Dec 14,2019
Date of admission	Dec 26,2019	Dec 22,2019	Dec 28,2019	Dec 28,2019	Dec 28,2019	Dec 27,2019	Dec 14,2019
Fever	+	+	+	+	+	+	+
Body Temperature (°C)	38.4	37.3	39	37.9	38.7	37.2	38
Cough	+	+	+	+	+	+	+
Sputum Production	+	+	-	-	-	-	+
Dizzy	+	-	+	+	-	+	-
Weakness	+	-	+	-	-	-	-
Chest tightness	+			+	+	-	
Dyspnea	+	-	-	+	+	+	
Bacterial culture			streptococcus pneumoniae	streptococcus pneumoniae	-	-	streptococcus pneumoniae
Glucocorticoid therapy	No	No	Yes	Yes	Yes	Yes	No
Antibiotic therapy	Cefoselis	Ceftazidime, Levofloxacin	Cefminox	Cefminox, moxifloxacin	Cefminox	No	No
Antiviral therapy	Oseltamivir	No	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	Oseltamivir, ganciclovir	No
Oxygen therapy	mechanical ventilation	No	No	Mask	No	No	No

The Wuhan&Hubei CDC 30 Dec <u>document</u> mentions 7 patients from Central hospital, Houhu district (that day the Nanjing road patients were already transferred to Tongji or Jinyintan or ?), This <u>Central hospital story</u> also mentions 7 patients in Houhu district.

#### https://archive.ph/wgtCY

Story of a patient in emergency ward hospitalized for something else. She recalls

Not long after, a middle-aged man accompanied his mother to the hospital. The man ran
a poultry shop in the Huanan Seafood Market. His mother developed some symptoms of

pneumonia and kept a high fever. The man soon developed a fever and was hospitalized with his mother.

He asked and recorded the occupational conditions of the three patients, and learned that the man's mother often went to the Huanan Seafood Market to deliver meals.

(so likely 41M2 and 70F, although there are some inconsistencies, mainly because 41M2 was hospitalized before his mother)

The story also confirms 4 patients in emergency ward of Houhu as of Dec 29, only 1 before Dec 27.

In his 30 Dec Wechat post Li Wenliang was referring to the 7 patients in Houhu district https://baijiahao.baidu.com/s?id=1657137746847714192&wfr=spider&for=pc

7 cases of SARS confirmed in the South China Fruit and Seafood Market and quarantined in the emergency department of our hospital Houhu District

#### Internal document 新型冠状病毒疫情处置情况说明

This internal document 新型冠状病毒疫情处置情况说明 was mentioned in several March articles and is available on twitter.

Translation:

#### 1/2

Description of the disposition of the novel coronavirus outbreak

Description by: Wuhan Central Hospital, Department of Public Health Time: February 8, 2020 Disposal process:

On December 29, 2019, around 2:30 pm, Dr. Peng from the Emergency Department of Houhu Hospital called: the department just received four cases of patients from the South China Seafood Market, the CT examination found that the lungs have problems, and the comprehensive blood tests showed that they were all manifestations of viral pneumonia. I immediately called Wang Wenyong at the Jianghan District CDC to report this unusual event, and Wang replied that the district had also received reports from other places in recent times, and had sent them to the city to check the pathogens without results.

He asked me to pay close attention to the matter, organize a consultation with experts in the hospital, and tell the hospital's infection office to do a good job of sterilization and isolation. I conveyed this advice to Dr. Peng and asked him to report to the Medical Office to organize a consultation with specialists in the hospital, and at the same time called Li of the Hospital Infection Office to inform him of the situation and ask him to report to the Chief of the Hospital Infection Department to guide the work related to hospital infection.

At about 16:00 that day, I received a call from the head of the Department of He Xiaoman, informing me that after the consultation of the respiratory medicine experts to the emergency

department, the Department of Respiratory Medicine also had several cases from the South China Seafood Market, increasing the number of cases to seven. 16:30: I again called the head of the CDC Wang Wenyong, who said that they are in the flow of neighboring hospitals, and asked us to wait for notification. At about 16:40: Chief He Xiaoman called me and told me that he had contacted the city CDC.

#### 1/2

The city and district CDC will then come to Houhu Hospital for sampling. At around 20:00 that night, the district CDC and the city emergency office arrived at the Houhu Hospital, conducted epidemiological investigations and sampled seven patients, and sent samples to the city CDC overnight.

On December 31, I asked Zhang Yan, deputy director of the Jianghan District CDC, about the sampling results by phone, and Zhang Yan told me to wait for notification.

On January 3, I called Wang Wenyong, the head of the Jianghan District CDC, and asked whether the seven cases of viral pneumonia reported by telephone should be reported on the infectious disease report card. Chief Wang replied that for this kind of special infectious disease, we should wait for the notification from the higher level before reporting, and we should wait for the notification of the specific kind of disease to be reported.

On January 4, we received a guidebook on viral pneumonia of unknown origin from the municipal health committee, which stated that for suspected cases, the hospital should organize a consultation with experts within 12 hours, and report the infectious disease report card immediately if the consultation cannot be ruled out.

On January 5, the health committee of the jurisdiction organized a meeting to convey the spirit of the municipal guidance manual. The district's opinion was that if a suspected case could not be ruled out by the hospital's expert consultation, it should be reported to the district health committee, and the district should organize an expert consultation and report the infectious disease report card if it could not be ruled out. After the meeting, I talked with the head of the medical administration section of the district health bureau about who and how to report the district-level expert consultation, and the medical administration section replied that our hospital is a municipal hospital and should be consulted by municipal experts. I called the Medical Affairs Division of the Municipal Health Commission on the spot, and the Municipal Medical Affairs Division said that the hospital should be under local jurisdiction, and that the comrades of the District Health Bureau had a misunderstanding, and he helped to coordinate the matter. Subsequently, the colleague from the district medical administration department agreed to organize a consultation with experts at the district level, but also said that in the future, she should be contacted by the comrades from the hospital medical department.

#### 2/2

On January 8, I reported 9 unexplained pneumonia cards, 4 on January 9, and on the evening of January 9, the district CDC conducted an epidemiological investigation and sampling of the cases reported that day.

On January 11, a patient from Houhu Hospital could not be ruled out in an in-hospital consultation, and the Medical Affairs Department submitted the consultation opinion to the Medical Administration Section of the District Health and Wellness Committee, which requested the hospital to contact the district CDC for sampling and flow investigation. Our department immediately contacted Zhang Yan, the director of Jianghan District CDC, but Zhang said that we had to wait for the notification from the medical administration.

At 11:30 a.m. on January 12, Director Xu of the Law Enforcement and Supervision Department of the Provincial Health and Wellness Commission led a team to supervise the work of the fever clinic at the Houhu Hospital and gave instructions that the report card for

infectious diseases should be reported carefully, and that the card should be reported after the joint determination by the province and the city.

At 9:00 a.m. on January 13, Director Wu Fengbo of the Disease Control Department of the Municipal Health and Wellness Commission and a delegation from the Disease Control Department of the District Health and Wellness Commission went to Nanjing Road Hospital to convey the spirit of reporting the latest cases of pneumonia of unknown origin. Director Wu pointed out that cases of unexplained pneumonia should be reported with caution. The viral pneumonia cases found must first complete the tests and related examinations in the hospital, be diagnosed as pneumonia of unknown origin by the hospital expert group, and then reported to the district health committee for consultation and notification to the district CDC for sample collection, and be tested at the district, city and provincial levels, and still be reported as pneumonia of unknown origin only after the provincial health committee agrees. At 9:00 a.m. on January 13, I received a phone call from Wang Wenyong, the head of the transmission and prevention section of the Jianghan District CDC, asking me to report the case of pneumonia of unknown origin that was reported on January 10: Wu Zhengzheng for other diseases.

At 15:00 on January 13, I reported the 11th patient Liu

The matter of the inability to sample and flow transfer was reported to the Disease Control Department of Jianghan District Health Bureau, and the Disease Control Department replied: etc. (Report content:

#### 2/2

Hello, Mr. Wang! Now there is a matter, that is, the suspected cases are reported, the flow of sampling process, the district health bureau of medical administration said that the district is now directly reported to the city, and then our hospital itself notified the CDC flow of sampling, but the CDC side said to wait for the notification of medical administration. (Now a patient reported to the Department of Medical Administration on Saturday, until now there is no sampling and flow transfer, I do not know where the problem, can you help ask a ah?)

At 15:00 on January 16, I asked the neighboring hospitals about the recent card reports and learned that no cards had been reported recently either.

At 16:00 on January 16, the CDC sent two staff members to take samples of 48 suspected cases in our hospital.

On the evening of January 17, the provincial CDC came to the hospital to conduct epidemiological investigation of the cases sampled on January 16.

The epidemiological investigation of the cases sampled on the 16th and the collection of clinical data of the cases.

On Jan 1 it received an 8th patient 65M2 the owner of a clinic near the market (see [1])

### Nanjing road

65M1 was in Nanjing road in respiratory department but transferred to Tongji hospital a few days later (Dec 25),

41M1 was received in Ai Fen's emergency department (in Nanjing road according to the whistle blower and Caixin report), then transferred to the pulmonary department.

Ai Fen is usually said to be director of the emergency department of Wuhan Central Hospital without clarifying Houhu versus Nanjing. In [1] she is said to be from Houhu, but there were a lot of changes in 2020. In [2] "In the first week of January, Ai Fen's emergency department transformed the emergency surgery ward of Houhu Hospital into a respiratory isolation ward with about 20 beds." [3] Says that she was switching between Gusaoshu road (Houhu) and Nanjing road.

 One last case, 66M, who died, mentioned in http://www.nhc.gov.cn/yjb/s3578/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml

#### Articles on Central and Ai Fen

http://web.archive.org/web/20200326145819/https://mp.weixin.qq.com/s/1zNY2YXy75snzwX3T q09Cq

https://www.newsgateny.com/timeline-of-the-initial-corona-virus-events-in-wuhan/https://www.kanzhongguo.eu/node/55574

#### https://archive.ph/aFPLy whistle blower

At noon on December 30th, a classmate of mine who worked in Tongji Hospital sent me a screenshot of a WeChat conversation. The screenshot said: "Don't go to South China recently, there are a lot of people with high fever..." He asked me if it was true. Yes, at that time, I was watching the CT of a typical patient with lung infection on the computer. I recorded an 11-second video of the CT and sent it to him, telling him that this was a patient who came to our emergency department in the morning, and he was also in South China. seafood market. Just after 4 p.m. that day, my colleague showed me a report, which said: SARS coronavirus, Pseudomonas aeruginosa, 46 kinds of oral/respiratory colonization bacteria. I read the report carefully many times, and the following note reads: SARS coronavirus is a single-stranded positive-stranded RNA virus. The main mode of transmission of the virus is close-range droplet transmission or contact with respiratory secretions of patients.

After calling the hospital, I also passed on this report to my classmates, and specially drew a red circle on the line of "SARS coronavirus, Pseudomonas aeruginosa, 46 kinds of oral/respiratory colonization bacteria" for the purpose of It is to remind him to pay attention and pay attention. I also sent the report to the group of doctors in the department to remind everyone to take precautions.

https://news.sina.cn/gn/2020-02-17/detail-iimxyqvz3653366.d.html Witnesses tell: The whole story of the infection of medical staff in Wuhan Central Hospital (includes an interview of Ai fen, alternate version [2])

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html Caixin report

https://archive.ph/TpyUQ#selection-1097.36-1097.279 Caixin March article

https://www.thepaper.cn/newsDetail\_forward\_6417161\_thepaper March article

Long story on Wuhan central hospital, mixing several doctor stories.

No mention of a sample sent for sequencing, prior to Zhang Fudan.

An internal document of Central hospital was sent to several media causing many articles in March 新型冠状病毒疫情处置情况说明

https://www.sohu.com/a/374294079\_113767 Ai Fen, Director of the Emergency Department of Wuhan Central Hospital: A "women hero" who has not been on the line for more than 40 days https://new.qq.com/rain/a/20200217A0PZTP00

http://www.infzm.com/contents/178912 Li Wenliang was in Nanjing road (opthalmology department)

https://www.medsci.cn/article/show\_article.do?id=2f19190169f7 including statement from Zhao Su 2nd author of the Wuhan-Hu-1 paper

https://archive.ph/wgtCY Detailed story by a non-coronavirus patient hospitalized in the emergency ward of Houhu

https://archive.ph/2isMJ globaltimes, mixes several testimonies of different doctors Caixin, the 1st whistleblower Li Wenliang https://archive.ph/vh2MJ

Li Wenliang interview on Jan 30 http://www.bjnews.com.cn/detail/158044099415716.html

"seven people from the Huanan Fruit and Seafood Market came to our hospital for treatment and were then isolated. Initially, the test results of the seven individuals showed that they were infected with the SARS coronavirus."

He is denying that Beijing Boao sequenced 41M1 accountant

The report shows that the test was conducted by Shenzhen Huada Gene Technology Co., Ltd.,

(深圳华大基因科技有 whose correct translation is BGI (华大基因))

### https://new.qq.com/rain/a/20200217A0PZTP00

According to Ai Fen the first healthworker case was a nurse in Houhu found on Jan 10.

http://zgmjyxw.com/zgmjyxw/index.php?g=home&m=article&a=show&id=3209 March 24, seems to be based on the globaltimes article and the internal document

Xinhua Official version after Li Wenliang 's death <a href="http://www.xinhuanet.com/2020-03/19/c\_1125737457.htm">http://www.xinhuanet.com/2020-03/19/c\_1125737457.htm</a> and an unofficial one <a href="https://zhuanlan.zhihu.com/p/395450504">https://zhuanlan.zhihu.com/p/395450504</a> with more details. Two years after his death

https://view.inews.qq.com/a/20220322A01VSG00?startextras=0\_0d817bd8905a6&from=ampzkqw



## CDC

### Jianghan district CDC

Detailed story of Wang Wenyong, chief of the infectious disease control department of the Jianghan District Center for Disease Control and Prevention <a href="http://news.china.com.cn/2020-04/02/content-75889879.htm">http://news.china.com.cn/2020-04/02/content-75889879.htm</a>

### Wuhan CDC

Moved 400m South of the market in early December. They also took Holmes into the game stalls in 2014.

### Dec 30 document

By the Wuhan & Hubei & Jianghan CDC.

Hospital reports on multiple cases of pneumonia in South China Seafood Market Investigation and Disposal Report

Deepl translated from the Chinese text in the source code of <a href="https://archive.ph/hvuNv">https://archive.ph/hvuNv</a>

This leaked document was first mentioned in http://archive.ph/vhuLZ (the Intellectuals)

On the afternoon of December 29, 2019, I received a notice from the provincial and municipal health and health commissions. Recently, the Provincial Hospital of Integrated Traditional Chinese and Western Medicine, the Houhu District of the Central Hospital and other hospitals have recently treated many cases of pneumonia with similar symptoms, including the South China Seafood Market. Exposure history, in order to find out the nature and scope of the epidemic, and immediately start the emergency response work process, the provincial and municipal CDCs, together with the Jianghan, Qiaokou, and Dongxihu CDCs rushed to the scene to carry out epidemiological investigations, specimen collection and testing, hospital infection For control and other disposal work, the investigation and disposal situation is reported as follows:

### 1. Basic information

Huanan Seafood Market is located in Jianghan District, with more than 650 stalls in the east and west areas and more than 1,500 employees. The sanitation environment in the western district is very poor, sales garbage is piled up everywhere, the ground is damp, and the ventilation is poor. The patients were mainly distributed in 12 stalls in the west area, 17 people in 1 stall in the east area, and 3 staff from non-fixed market stalls.

### 2. On-site epidemiological investigation

### (1) Case definition

Since December 1, 2019, the medical institutions in our city have been admitted to the Huanan seafood market and their family members have been diagnosed with pneumonia, and other pathogens have not been ruled out. By.

### (2) Case distribution

A total of 25 cases were searched, and 20 cases were verified through epidemiological investigation. The distribution is as follows:

1. Population distribution: The age ranged from 31 to 78 years old, mainly concentrated in 14 cases of 40 to 60 years old. There were 14 males and 6 females, with a male-to-female ratio of 2.33:1. Among them, 2 family members were exposed to the market together. Among them, there are family members in the family of the first patient Lan Xiaobiao (husband and wife: Lan Xiaobiao, Qi Yanxia, Lan Xiaobiao's brother Lan Bingbiao, Lan Xiaobiao's father-in-law Qi Xishan), and the second patient Chen Sanhong and his mother (Qiu Fenglan).

2. Time distribution: The earliest onset time of the investigated cases was on December 12, and the last case was on December 25. The onset curve is as follows.



- 3. Hospital distribution: At present, there are 4 cases in Jinyintan Hospital, 7 cases in Houhu District of Central Hospital, 8 cases in Tongji Hospital, and 1 case at home.
- (3) Clinical diagnosis Diagnosed

by medical institutions, 19 of 20 cases of pneumonia/pulmonary infection were investigated, and 1 case of fever was under investigation.

- 3. Laboratory tests
- (1) The Provincial Hospital of Integrated Traditional Chinese and Western Medicine has successively carried out 5 tests for influenza A and B influenza antigens (pharyngeal swabs) and respiratory pathogen antibodies for 5 patients admitted. Adenovirus IgM positive was detected in the middle and other patients were negative.
- (2) The Houhu District of the Central Hospital

has successively carried out 7 respiratory virus antibodies for 1 case and 4 cases of influenza A antigen rapid test, all of which were negative.

(3) Tongji Hospital

carried out 9 respiratory virus antibodies for the 7 patients admitted, all of which were negative.

(4) On the evening of December 29 and the early morning of December 30, the

Municipal Center for Disease Control and Prevention conducted two batches of throat swab samples collected from 17 patients to carry out nucleic acid testing for influenza virus and upper respiratory tract pathogens (20 species), and 5 were detected.

Streptococcus pneumoniae was positive, other pathogens were negative.

4. Analysis of the cause of

the disease (1) Currently in the epidemic period of respiratory diseases, the market has a high concentration of people, poor ventilation, and poor sanitary environment, which are the objective reasons for the occurrence of the cases.

(2) Judging from the results of the investigation of 20 cases, the vast majority of patients visited individual clinics or community health service centers in the early stage of the disease, or

purchased medicines for treatment at home, and only went to general hospitals for standardized treatment after the disease aggravated.

- (3) At present, no clustered cases have been found in this market. The stalls of patients are relatively scattered, there is no obvious contact and intersection, and there is no aggregation in time and space. There is only an exposure history of the South China Fresh Market.
- V. Measures have been taken
- (1) A detailed on-site epidemiological investigation of the market has been carried out, and only 13 stalls have been found to have cases so far.
- (2) Provinces, municipalities and districts have carried out on-site verification and detailed epidemiological investigations on reported pneumonia cases, and found out the onset, medical treatment process and suspicious exposure.
- (3) Samples from 17 patients were collected and tested for 20 pathogens including influenza. The Municipal Center for Disease Control and Prevention collected 12 environmental samples outside the Huanan Seafood Market on the morning of December 30, and the results are pending.
- 6. Recommendations for the next step
- (1) The market supervision department should strengthen the comprehensive sanitation of the market, and effectively do a good job in environmental cleaning and disinfection, daily ventilation, etc.
- (2) The health department shall further strengthen the monitoring of unexplained diseases of the relevant population in the market, and do a good job in the early detection, early investigation and early disposal of suspicious patients.
- (3) All medical institutions should further standardize the operation of fever clinics and preexamination and triage, conduct early screening of influenza and other pathogens, early clear diagnosis and standardized treatment, and do a good job in infection control.

Provincial, Municipal and District CDC Joint Investigation Team December 30, 2019

### Hotels

## JiangCheng Hotel 江城酒店

From Caixin:

https://info.51.ca/news/china/2021-02/969598.html

Archived:

https://archive.vn/ITFkY

https://web.archive.org/web/20211206232905/https://info.51.ca/news/china/2021-02/969598.html

Caixin Original: https://china.caixin.com/2020-04-07/101539697.html

Archived: <a href="https://archive.vn/ODg7U">https://archive.vn/ODg7U</a>

https://web.archive.org/web/20200408141054/http://china.caixin.com/2020-04-07/101539697.html

2019年的华南海鲜市场,经过17年发展,已逐渐成为武汉餐饮业的配送中心,影响着江城酒店和众多市民的食谱,但其发展过程也出现了诸多问题。2010年不少摊位出售死龙虾,2016年有牛肉店制售甲醛"问题牛杂",2017年有商户的鱼类检出孔雀石绿,海鲜市场相继被有关部门查处过。多年来,这里更因为环境脏乱差多次被附近市民投诉,也因野生动物出售,备受诟病。

### Clinics

among the first 27 patients with pneumonia of unknown cause reported by the Wuhan Municipal Health and Health Commission on December 31, 2019, 11 chose to go to the nearest small clinic for medical treatment after experiencing symptoms such as fever. <a href="https://info.51.ca/news/china/2021-02/969598.html">https://info.51.ca/news/china/2021-02/969598.html</a>

A list of many nearby and as yet uninvestigated clinics in the area here: https://mbus.mapbar.com/wuhan/5FH5nL5ad91J6n95FZ71h8zc7hP\_DA0

发展大道汉口火车站附近有 艺琪医疗美容, 江汉王荣乔西医内科诊所, 武汉红琦先涛口腔门诊部, 武汉福兴中西医结合门诊, 武汉尚元春中医门诊部, 维乐口腔武汉清华阳光常青分院, 武汉民全门诊部, 江汉杨松山中医内科诊所, 武汉市侨泰同医门诊部, 武汉市新同协门诊部, 仁益通骨疼馆, 江汉张丽萍中医诊所, 武汉欧尚美医疗美容, 江汉吴永德中医诊所, 爱康齿科, 江汉卢耀华西医外科诊所, 武汉江汉康乐康综合门诊部, 江汉肖海静西医内科诊所, 江汉许召才中医诊所, 湖北航天医院花园卫生所 等诊所/卫生所,继续往下看, 了解具体信息。

There are Yiqi Medical Cosmetology, Jianghan Wang Rongqiao Western Medical Internal Medicine Clinic, Wuhan Hongqi Xiantao Dental Clinic, Wuhan Fuxing Integrated Traditional Chinese and Western Medicine Clinic, Wuhan Shangyuanchun Traditional Chinese Medicine Clinic, Wuhan Tsinghua Sunshine Changqing, near the Hankou Railway Station on Development Avenue. Branch, Wuhan Minquan Clinic, Jianghan Yangsongshan Traditional Chinese Medicine Clinic, Wuhan Qiaotai Tongyi Clinic, Wuhan Xintongxie Clinic, Renyitong Bone Pain Center, Jianghan Zhang Liping Chinese Medicine Clinic, Wuhan Auchanmei Medical Cosmetology, Jianghan Wuyongde Chinese Medicine Clinic, Akcome Dental, Jianghan Lu Yaohua Western Medical Surgery Clinic, Wuhan Jianghan Kanglekang Comprehensive Outpatient Department, Jianghan

Xiaohaijing Western Medical Internal Medicine Clinic, Jianghan Xu Zhaocai Traditional Chinese Medicine Clinic, Hubei Aerospace Hospital Garden Health Center and other clinics/health clinics, continue to go down Look for specific information.

## Map of Clinics of interest - UPDATE - Dr. Li is next to Xin Xin - add huanan, wuhan CDC



### Liu De Yuan's clinic

DRASTIC073 Dr. Liu Deyuan

Mentioned in this article:

https://info.51.ca/news/china/2021-02/969598.html

Archived:

https://archive.vn/ITFkY

https://web.archive.org/web/20211206232905/https://info.51.ca/news/china/2021-02/969598.html

Caixin Original: https://china.caixin.com/2020-04-07/101539697.html

Archived: https://archive.vn/ODg7U

https://web.archive.org/web/20200408141054/http://china.caixin.com/2020-04-

07/101539697.html

### Location

It is 200 meters from the North West parking entrance of the market.

### As described in the article:

**刘德炎西医内科诊所**在汉口火车站附近,门前有条小路,连着华南海鲜市场西区。

"The Liu Deyan Western Medical Internal Medicine Clinic is near Hankou Railway Station. There is a small road in front of it, which connects to the western part of South China Seafood Market."

[...]

"In May 2004, due to the demolition of the old city, the couple moved from Hanyang to Hankou and practiced medicine successively in Huangjiadawan, Hongqi Village, and Minhang Xinwan Road. In 2012, they moved the clinic to a community near Hankou Railway Station.

The clinic is a duplex house with 40 square meters on the first and second floors. They give injections and dispense medicines on the first floor, and store equipment and medicines on the second floor. The clinic is very close to the seafood market. Many merchants and workers from the seafood market also live in the community. They often come to the clinic for medical treatment and injections just like the nearby residents."

### Other notable quotes

At the beginning of December 2019, a lot of patients came to the clinic suddenly, with high fever and cough, as if they had a viral cold. "A large number of patients with high fever and cough from the seafood market came to us for injections." Aunt Chen recalled.

### Business details

https://aiqicha.baidu.com/company\_detail\_18803543084973 https://archive.vn/6jAeO

### Street view of Clinic

https://map.baidu.com/@12720111.19,3562087.61,21z,87t,-

78.97h#panoid=09000200121905200903061018V&panotype=street&heading=106.51&pitch=-2.72&l=21&tn=B\_NORMAL\_MAP&sc=0&newmap=1&shareurl=1&pid=09000200121905200903\_061018V

the text is 江汉刘德炎西医内科诊所 (Jianghan Liu Deyan Western Medicine Clinic)



https://archive.ph/GwUWR



Appears also at 1:06 in this video 后的华南海鲜市场:市场仍紧闭 周边商户部分复工

### XinXin Clinic

Location from Sogou

Not much info but location appears to be here on 马场后街, Machang back street. Fitting description in articles too.

http://map.sogou.com/poi/1\_D1000144567374.htm



### Description in Tribute to Dr. Liu Deyan

https://info.51.ca/news/china/2021-02/969598.html

Archived:

https://archive.vn/ITFkY

https://web.archive.org/web/20211206232905/https://info.51.ca/news/china/2021-02/969598.html

Caixin Original: https://china.caixin.com/2020-04-07/101539697.html

Archived: https://archive.vn/ODg7U

https://web.archive.org/web/20200408141054/http://china.caixin.com/2020-04-

07/101539697.html

### Original (our emphasis):

与众生门诊隔着一条马路,在发展大道南侧,是唐家墩街道马场社区。该社区内有8处(13栋)无人管理的单位型老旧宿舍区,有456栋"城中村"私房。在楼盘万科圆方以东,唐家墩路以西,一大片都是两三层的旧房子,小吃店、出租房、菜市场、集贸市场、超市错杂其中,李医师诊所、**鑫鑫诊所**等数家地下小诊所也散布在小巷里,它们也曾接诊过不少发热病人。

Translation:

Separated from the Zongsheng clinic, on the south side of Development Avenue, is the Machang Community of Tangjiadun Street. There are 8 (13) unmanaged unit-type old dormitory areas in the community, and 456 "village in the city" private houses. To the east of Vanke Yuanfang and west of Tangjiadun Road, there is a large area of old houses with two or three floors. Snack shops, rental houses, vegetable markets, bazaars, supermarkets are intertwined among them, Dr. Li Clinic, Xinxin Clinic, etc. Small underground clinics are also scattered in alleys, and they have also treated many fever patients.

The above description matches the location

#### ADD THE OTHER MENTIONS OF XIN XIN

### The Paper article

https://mp.weixin.qq.com/s?src=11&timestamp=1629823520&ver=3272&signature=nrz46\*aPAj d\*hwsC7w-

hohl5jHbCEhNQdfjWuPxDu4Pl5lxNAglKkDkLKVlQdlQDpAkrjHnfH\*x6B70MYMSFvc5nSG0m\*S THQFEOdUmndAwdsHSm0VeWtAUZnK9\*sOl3&new=1

Archived at: https://archive.vn/V29XO

### Chinese excerpt

2月23日,澎湃新闻记者实地探访华南海鲜市场附近的居住环境发现,名单中的诊所均已 关门歇业,且多位于华南海鲜市场附近的老旧小区。

以"鑫鑫诊所"为例,该诊所位于唐家墩街马场社区,与华南海鲜市场一街之隔,多为老旧小区,租金低廉。首批确诊名单中,至少有4人在此就医。

该社区张贴的通告显示,截至2月27日12时,该社区共30人确诊新冠肺炎,治愈11人,死亡3人;疑似病例55人,死亡2人。

### English translation

On February 23, The Paper reporters visited the living environment near the South China Seafood Market and found that the clinics on the list were closed and mostly located in old communities near the South China Seafood Market.

Take "Xinxin Clinic" as an example. The clinic is located in the horse farm community of Tangjiadun Street, across the street from the South China Seafood Market. It is mostly an old community with low rent. In the first batch of confirmed cases, at least 4 people seek medical treatment here.

The notice posted by the community showed that as of 12:00 on February 27, a total of 30 people in the community had been diagnosed with new coronary pneumonia, 11 were cured, and 3 died; 55 were suspected cases and 2 died.

### The Paper video

The XinXin clinic is also mentioned in the audio of the video by 'The Paper':

With similar information to the article

### Excerpt:

(2:41) [Narrator's text]: According to what the list [of the first group of patients, as noted above] shows, within the first group of confirmed patients linked to Huanan Seafood Market who displayed symptoms such as fever, etc, 11 of them chose to get medical help in small clinics. Feb. 23 [2020]: A reporter in the field for *The Paper* visited the living environment in the area of the Huanan Seafood Market and discovered that the clinics on the list were already closed and gone out of business. Most of them were in the old communities in the area of the Huanan Seafood Market. For example, Xinxin Clinic [金金沙所] was located on Tangjiadun Street in the Machang community, one street away from Huanan Seafood Market, mostly serving an old, low rent community. In the list of the first group diagnosed [with coronavirus], at least four people got medical help here. A notice put up in that community shows that as of noon Feb. 27 [2020], thirty people in that community had been diagnosed with coronavirus. Of those diagnosed, 11 were cured, and 3 died. And out of 55 suspected cases, 2 had died.

### Dr. Li's Clinic

Name: 李医师诊所

It is 120m from the South East entrance of the East side of the market, through Development avenue.

Sogou and google maps, as well as its description in the article place it near Xin Xin on 马场后街 , Machang back street.

方名图

### Location from Sogou

李医师诊所 - 湖北省武汉市江汉区马场后街107号附近 (From Sogou)

http://map.sogou.com/t/iXqC5K 新闻 网页 微信 知乎 英文 **S**搜狗地图 自 驾 收藏夹 李医师诊所 搜索 🥋 首页 当前区域内共1个结果 💶 李医师诊所(马场后街) 详情>> 地址: 湖北省武汉市江汉区马场后街107号附近 蓝空国粹疆 红璞酒店 福康居小区 马场后街

Location from Google

万科·圆方 马场路





### Description in Tribute to Dr. Liu Deyan

https://info.51.ca/news/china/2021-02/969598.html

Archived:

https://archive.vn/ITFkY

 $\frac{\text{https://web.archive.org/web/20211206232905/https://info.51.ca/news/china/2021-02/969598.html}{\text{02/969598.html}}$ 

Caixin Original: https://china.caixin.com/2020-04-07/101539697.html

Archived: <a href="https://archive.vn/ODg7U">https://archive.vn/ODg7U</a>

https://web.archive.org/web/20200408141054/http://china.caixin.com/2020-04-

07/101539697.html

### Original (our emphasis):

与众生门诊隔着一条马路,在发展大道南侧,是唐家墩街道马场社区。该社区内有8处(13栋) 无人管理的单位型老旧宿舍区,有456栋"城中村"私房。在楼盘万科圆方以东,唐家墩路以西,一 大片都是两三层的旧房子,小吃店、出租房、菜市场、集贸市场、超市错杂其中,**李医师诊所**、 鑫鑫诊所等数家地下小诊所也散布在小巷里,它们也曾接诊过不少发热病人。

### Translation:

Separated from the Zongsheng clinic, on the south side of Development Avenue, is the Machang Community of Tangjiadun Street. There are 8 (13) unmanaged unit-type old dormitory areas in the community, and 456 "village in the city" private houses. To the east of Vanke Yuanfang and west of Tangjiadun Road, there is a large area of old houses with two or three floors. Snack shops, rental houses, vegetable markets, bazaars, supermarkets are intertwined among them, Dr. Li Clinic, Xinxin Clinic, etc. Small underground clinics are also scattered in alleys, and they have also treated many fever patients.

The above description matches the location

Guy at 10 minsish in this video also went to a clinic on machang back street, same as liu and xinxin

https://www.youtube.com/watch?v=mCT2fp7QLIE

Zhong Sheng Clinic (Mrs Wei)

Wei Guixian's clinic 武汉众生门诊部

Video from The Paper

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

The clinic is shown several times in the video from the paper



Screenshot from The Paper's video

Baidu

maps

 $\frac{\text{https://map.baidu.com/}@12720820.63,3561980.15,21z,87t,57.5h\#panoid=09000200011604241}{305146258A\&panotype=street\&heading=10.93\&pitch=1.57\&l=21\&tn=B\_NORMAL\_MAP\&sc=0\&newmap=1\&shareurl=1\&pid=09000200011604241305146258A}$ 

The sign says 武汉众生门诊部 (Wuhan Zhongsheng Outpatient Department)



Name: 武汉众生门诊部

Address: 武汉市江汉区陈家墩1号

### https://archive.ph/ODg7U

On the first floor of the residential building of No. 1 Chenjiadun, there is a signboard of "Wuhan **Zhongsheng** Outpatient Department", with white characters on a green background, which is particularly eye-catching. According to public information, the **Wuhan Zhongsheng Comprehensive Outpatient Department** was formerly known as the Wuhan Tianhe International Airport Infirmary, and later moved to its current location and transformed into a multi-department medical institution. In 2018, the outpatient department changed hands and was run by a boss surnamed Xu.

This is one of the closest clinics to the seafood market. A former employee said the outpatient department was small, with two doctors and two nurses. A few days later, like all the small clinics in Wuhan, the **Wuhan Zhongsheng Outpatient Clinic** has closed the door, and there are notices posted on the door and on the wall next to it, saying, "Interior decoration, closed for 15 days." The reporter called the outpatient boss many times and was told that "the user has enabled the communication assistant to record calls". After leaving a message, there was no reply. An insider revealed that the outpatient clinic owner was infected before New Year's Day.

### https://archive.ph/aKPei

According to the residents of the community, it was found that residents were infected very early here. The **Wuhan Zhongsheng General Outpatient Department** on the right side of the gate of the community is one of the earliest clinics to receive patients. The clinic was closed before Wuhan closed the city, and a notice was posted on the glass door: "Interior decoration, closed for 15 days.

### https://archive.ph/cD8vR

Contains a deputy doctor and description of traditional medicine practice.

Recommended doctor: Wang Feng

The HIV positive guy? Was he linked to here?-no

Pharmacy he was at is unclear.

Need to add New 52M patient.

Possibilities for pharmacy near market entrance:

https://mbus.mapbar.com/wuhan/9fi5Sw8tl6Mm5DE8tl5FZ\_yaodian

Nevermind, there's too many pharmacies to search.

中联大药房(八古墩分店) Zhonglian Pharmacy (Bagudun Branch)

赵冬枝 Zhao Dongzhi (owner)

location

好药师大药房 Good Pharmacist Pharmacy

location

博信仁药店 -Boxin Jen Pharmacy

Location

益丰大药房(马场二路店) Yifeng Pharmacy (Machang 2nd Road)

Location

Aiqicha entry

https://aiqicha.baidu.com/company detail 20119395221013

Archived: https://archive.vn/uzS69

Boss name: 徐煌

Address: 武汉市江汉区陈家墩1号

Also mentioned in Caixin

https://info.51.ca/news/china/2021-02/969598.html

Archived:

https://archive.vn/ITFkY

 $\underline{\text{https://web.archive.org/web/20211206232905/https://info.51.ca/news/china/2021-pdf}.$ 

02/969598.html

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https://web.archive.org/web/20200408141054/http://china.caixin.com/2020-04-07/101539697.html

### Note that the boss surname is the same as the aiqicha entry, 徐煌

Original (our emphasis of Boss's name)

海鲜市场属江汉区唐家墩街道陈家墩社区管辖,该社区张贴的通告显示,截至2020年2月 26日,社区确诊病例32例,疑似病例36例,密切接触者46例,一般发烧病人23人。

陈家墩1号的居民楼一楼,挂着一块"武汉众生门诊部"的招牌,绿底白字,格外醒目。公开信息显示,武汉众生综合门诊部前身为武汉天河国际机场医务室,后迁至现址,转型为一所多科室医疗机构。2018年门诊部转手,由一**徐姓老板**经营。

这里是离海鲜市场最近的门诊之一。一位前员工称,门诊部不大,有两个医生,两个护士。多日之后,武汉众生门诊部像武汉市所有小诊所一样,已经大门紧闭,门上及旁边墙上还贴着通知,称"内部装修,暂停营业15天"。笔者多次拨打门诊老板电话,均被告知"用户已启用通讯助理录话提醒"。留言后,亦无回复。有知情者透露,这里也曾经接诊过华南海鲜市场最早一批发烧患者,也有医生被感染。

### Translation

The seafood market is under the jurisdiction of Chenjiadun Community, Tangjiadun Street, Jianghan District. The notice posted by the community shows that as of February 26, 2020, there were 32 confirmed cases in the community, 36 suspected cases, 46 close contacts, and 23 general fever patients.

On the first floor of the residential building in Chenjiadun No. 1, there is a signboard of "Wuhan Zhongsheng Outpatient Clinic" with white characters on a green background, which is particularly eye-catching. Public information shows that the Wuhan Zhongsheng Comprehensive Clinic was formerly the medical office of Wuhan Tianhe International Airport, and later moved to its current location and transformed into a multi-disciplinary medical institution. In 2018, the outpatient department changed hands and was run by a boss surnamed Xu.

This is one of the closest clinics to the seafood market. A former employee said that the outpatient department is small, with two doctors and two nurses. Many days later, like all

small clinics in Wuhan, the Wuhan Zhongsheng Outpatient Department had its doors closed, and notices were posted on the doors and on the walls next to it, saying "Internal decoration, business will be suspended for 15 days." The author made multiple calls to the outpatient boss, and was told that "the user has enabled the communication assistant to record call reminders." After leaving a message, there was no reply. An insider revealed that the first batch of fever patients at the South China Seafood Market had been treated here, and there were also doctors who were infected.

## Fever clinic at Wuhan Zhongyang Traditional Chinese Medicine Hospital

https://info.51.ca/news/china/2021-02/969598.html

Archived:

https://archive.vn/ITFkY

https://web.archive.org/web/20211206232905/https://info.51.ca/news/china/2021-02/969598.html

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Archived: https://archive.vn/ODg7U

https://web.archive.org/web/20200408141054/http://china.caixin.com/2020-04-

07/101539697.html

### Original

由海鲜市场西区沿发展大道西行数百米,至汉口火车站面对着的青年路再南行几十米,至武汉天街,这里的商业2号楼有一家武汉中阳中医院。官网介绍,该医院设有内科、外科、精神科等科室。医院经营者明小烨向记者介绍,医院也设有简单的发热门诊。明小烨称,对于海鲜市场的发热病人,医院知道情况是在2019年12月中旬,当时有一些说法。医院有些老医生比较敏感,医院自我防护比较早,要求医护人员戴口罩,做一些基本防护。

### Translation

From the western area of the seafood market along the development road for several hundred meters to the west, to the Qingnian Road facing Hankou Railway Station and then several tens of meters to the south, to Wuhan Tianjie, where there is a Wuhan Zhongyang Traditional Chinese Medicine Hospital in Commercial Building 2. According to the official website, the hospital has internal medicine, surgery, and psychiatric departments. The operator of the hospital, Ming Xiaoye, told reporters that the hospital also has a simple fever clinic. Ming Xiaoye said that for fever patients in the seafood

market, the hospital knew that the situation was in mid-December 2019, and there were some opinions at the time. Some old doctors in the hospital are more sensitive and self-protection is relatively early in the hospital. Medical staff are required to wear masks and do some basic protection.

### 苏医师中西医门诊?

Another clinic seen in multiple videos that we haven't yet investigated:



### Also:



## The Mahjong Room

Introduction to Mahjong culture



Not Huanan but illustrative of older players, confined space.

Mahjong is especially popular among older people. https://www.bbc.com/news/world-asia-china-50162766

Usually played for small amounts of money. Playing for money is considered gambling and is illegal. Managing a parlor with money bets is illegal, however there is often a tolerance for small bets (~\$20).

https://www.scmp.com/news/china/society/article/3033912/mahjong-houses-fall-silent-china-purifies-its-social-environment

Under Chinese law those who gamble or provide a venue for gambling for profit may be detained for up to 15 days or fined up to 3,000 yuan. There is also a criminal penalty up to 10 years in jail for those who make a living by gathering people to gamble.

https://www.legalgamblingandthelaw.com/news/chinese-authorities-crackdown-on-favourite-pastime-mahjong/

Typical Mahjong games usually have bets from \$1 to \$15. Gambling is technically illegal in China but Jiangxi province has laws that protect those who play for small amounts of money. But there is a provision which states that players who gamble for more than \$28 could be punished.

It's often clandestinely played in confined, poorly ventilated rooms. Shutting them down has been a major priority in China and other East Asian countries as they are known to cause

superspreading events. In facts China's worst outbreak post-Wuhan started in and mostly was confined to mahjong rooms in Yangzhou.

https://www.bangkokpost.com/world/2164271/china-mahjong-dens-were-superspreader-sites-spurring-crackdown

Destruction of automatic mahiong tables in Jan 20 to fight Covid-19. https://youtu.be/hfzu2weBNDE

"'Those who gather together are shameless; those who play mahjong are daredevils,' reads a banner plastered across Chinese cities. 'Report mahjong houses that your parents go to" <a href="https://www.spectator.co.uk/article/mahjong-is-becoming-a-problem-for-china-s-zero-covid-society">https://www.spectator.co.uk/article/mahjong-is-becoming-a-problem-for-china-s-zero-covid-society</a>

Market workers say most cases were tied to a mahjong game that at least one reporter visited on the last day it was open.

Ambiguity of references to 打牌

Chinese news references to the mahjong room in Huanan use the ambiguous phrases 打牌 or 牌友, which can mean either to play mahjong or to play cards. Both English language articles mentioning it use "mahjong" and image searches mostly show mahjong tiles.

Mahjong and card games involving gambling are both illegal in China and would be played by similar people in similar locations so we believe this distinction is likely not significant.

### Cases with known links to Mahjong

<u>DRASTIC048</u>, pseudonym Zhang Zhi, was a retired worker who visited to play mahjong. Became ill Dec 13

<u>DRASTIC040</u>, shrimp seller Wei, denied playing Mahjong implying knowledge of the Mahjong cluster. <u>She also suggested she may have been infected via a public toilet</u>, and <u>the Mahjong room</u> is next to a public toilet

<u>DRASTIC029</u>, Lan Xiaobiao a dry condiments stall owner who initiated the 4 person family cluster became ill after playing mahjong on Dec 12 as did a woman he played with.

Commented [20]: Where are the references that substantiate this?

Commented [21]: they should go under the headings of the cases themselves

Commented [22]: Though I do not know yeti where the reference for DRASTIC029 is - asked Brian about that

Commented [23]: so clearly she had mahjong in mind as she attempted a connection via the toilets

Commented [24]: https://archive.ph/NhRD4

### New Yorker article and the hidden Mahjong parlor next to the toilet

https://www.newyorker.com/magazine/2020/10/12/nine-days-in-wuhan-the-ground-zero-of-the-coronavirus-pandemic

The shopkeeper said that nobody he knew in the eyeglasses market had been infected. His assistant, a woman in her twenties, claimed that there hadn't been any cases on their floor. "It wasn't like downstairs," she said. "That's where the disease spread." Later, I saw a news article indicating that some staff at the glasses market had been infected, but the story lacked clear details, and I wasn't sure what to believe. And I wondered if this is what folks are bound to say if you go to any ground zero and walk up a flight of steps: Nothing happened here. We're fine. It was those people downstairs.

The shopkeeper mentioned an illicit mah-jongg parlor in the seafood market. "I heard that four people were playing at one table, and all four got sick," he said.

It sounded like another rumor, but subsequently I met a Wuhan journalist who had visited the mah-jongg parlor. His memories also revolved around precise dates: he told me that he had gone to the seafood market on December 31st, the day before it was closed. By then, the journalist had heard about a possible virus, and also about some mah-jongg infections. He found the players unfazed by the rumors, still gambling for small stakes. "It was kind of a secret room," the journalist said. Like many people I talked to in Wuhan, he asked not to be named. He continued, "It was next to the public toilet, and you had to climb a ladder to get there. You wouldn't find it unless you were looking for it. Everybody was smoking and there was no ventilation." The journalist hadn't written about the mah-jongg infections, in part because at that time the local government still hadn't announced that the disease could be transmitted by human contact. "But I personally worried that it was probably spreading between people," he recalled. He didn't wear a mask, though he had purchased some at a nearby pharmacy.

Interview with the caretaker Old Gu

### https://archive.is/8PyRd

"Old Gu", a Huanan worker who knew many of the initial patients told The Paper that market workers suspected the outbreak began among a group of mahjong [alt: card] players that included people from outside. Transcription of 4:10-4:50 of the the interview:

Transcription:

Commented [25]: includes a 65F jan 4th onset case with no market connection

直至今日 仍有工作人员不肯相信 华南海鲜市场就是这次疫情的发源地. 他介绍 官方首次通报的 27 名感染者中 大多有一个共同爱好 ——喜欢打牌. 他认为 可能是这些人的外来牌友,将病毒带进市场的. (声音来源: 华南海鲜市场 办公室工作人员)

因为我们华南市场最开始被感染)的二十几个人. 基本上大多数喜欢打牌在市场里面打牌 但是呢他们打牌的朋友有从外面进来的

刚开始12月份的时候我们听到消息的时候我们一听名字.哦都是喜欢打牌的. 他们得了你像其他的人都还好. 所以这个东西不好说.

#### Translation

To this day, some workers still refuse to believe that the South China Seafood Market is the source of the outbreak. He said most of the 27 infected people first reported by officials have one thing in common - they like to play mahjong [alt: cards]. He believes that the virus may have been brought into the market by their foreign poker[poker??] friends.

[Speaking voice: South China Seafood Market office staff]

"The first two dozen people were infected at South China Market. Basically, most of them like to play mahjong [alt: cards] in the market, but their friends who play mahjong [alt: cards] have come in from outside."

"When we heard the news at the beginning in December, we heard the names. Oh, they all like to play cards. They got you like everyone else. So this thing is not easy to say."

Beijing News: Wuhan South China Seafood Market in the Incident of Unexplained Pneumonia

### https://archive.is/wgtCY

people.cn, based on a Beijing News news story reported from a Dec 31 visit. A vendor says "he only heard on the morning of December 31 that three shopkeepers who often played mahjong [alt: cards] at stalls near Tenth Street were hospitalized two days ago."

Relevant quotes:

### Original 1

洪伟(化名)是西区六街一家水产店的老板,他告诉新京报记者,他12月31日早晨才听说 ,有3位常在十街附近档口<u>打牌</u>的店铺老板前两天住院了,他发微信问候其中一个老板, 对方回复"感染了病毒"

### Translation 1

Hong Wei (pseudonym) is the owner of an aquatic product shop on Sixth Street in West District. He told the Beijing News reporter that he only heard on the morning of December 31 that three shopkeepers who often played mahjong [alt:cards] at stalls near Tenth Street were hospitalized two days ago. , He sent a WeChat greeting to one of the bosses, and the other party replied "infected with a virus."

### Original 2

其中一家调味料店的邻居商户徐萍(化名)告诉新京报记者,这家店染病的老板是位四五十岁的男子,平时喜欢熬夜<u>打牌</u>,近日得了感冒后"也没在意",最初没有去看医生,隔了几天发现病情加重后才去医院,最终被确诊为肺炎。

### Translation 2

Xu Ping (pseudonym), a **neighbor of a condiment shop**, told the Beijing News that **the owner of the shop was a 40-50-year-old man**. **He usually likes to stay up late to play mahjong [alt: cards]**. After catching a cold recently, he "didn't care". He didn't go to the doctor, and only went to the hospital after finding that his condition got worse a few days later. He was finally diagnosed with pneumonia.

The same article suggests that colds/flus/ even pneumonia aren't so unusual, perhaps supporting zoonosis somewhat:

"A number of interviewed merchants said that in the past years, some shopkeepers in the market had colds or even pneumonia, but they did not pay too much attention."

Mother delivering meals in this account may be **DRASTIC054** 

### Maybe can figure out this person too

On the evening of December 31, the son of a condiment shop owner in the west section of the South China Seafood Market told the Beijing News that his father had been treated in the Houhu hospital after he was diagnosed with pneumonia. "(The treatment) went well and everything was very good.", Had been prepared to be discharged from the hospital, but was transferred to the Wuhan CDC for treatment. He didn't know the specific reason.

-- maybe not, 49M condiment seller went to Jinyintan, though could that be a later transfer?

#### — Brian

Dad has same job as 49M. Sick on Dec 12 and recovering but forced to xfer to Jinyantan with others on Dec 30 for isolation? The CDC ordered this so might be what son meant. We know his stall was being kept open since CBN talked to an employee

## Where did the source of new coronary pneumonia come from? Experts think it is more likely to come from game

https://www.yicai.com/news/100476470.html https://archive.vn/NhRD4

### Original:

2019年12月31日下午,第一财经记者实地探访华南海鲜市场时,多位商户表示该市场有销售野味,比较丰富。一位销售家兔的商户表示,武汉军运会之前市场有卖野味,之后管理严格,就没卖了。

[照片: 几家关闭的店铺,附近店员说是此前销售野味的店铺]

在华南海鲜批发市场里面,记者看到有几家关闭的店铺,旁边销售人员说,这就是销售野 味的店铺,现在关掉了。

记者从华南海鲜批发市场一家干货调料店员工处了解到,这家店铺的老板、老板娘、老板 哥哥及岳父四人均得肺炎住院,四人平时居住在一起。

"我们老板是12月19日(2019年)患病的,患病前跟一个卖冻鸡冻鸭的牌友一起打牌,这位牌友也因肺炎收院治疗了。"上述员工说,老板先得病的,后来老板娘也病了。该员工说,老板和老板娘现在已基本恢复正常。老板娘的症状较轻,到晚间基本不咳嗽,医院按肺炎治疗,目前恢复良好。

### Translation:

On the afternoon of December 31, 2019, when a reporter from China Business News visited the South China Seafood Market on the spot, many merchants said that the market had a wealth of game. A merchant selling rabbits said that before the Wuhan Military Games, game was sold in the market, but after the strict management, they stopped selling.

[photo with caption: Several closed shops, the nearby clerk said it was a shop that sold game before]

In the South China Seafood Wholesale Market, the reporter saw several closed shops, and the sales staff next to them said that this is the shop selling game and it is now closed.

The reporter learned from an employee of a dry condiment shop in the South China Seafood Wholesale Market that the owner, wife of the owner, brother of the owner, and father-in-law of the shop were hospitalized with pneumonia, and the four lived together.

"Our boss became ill on December 19 (2019). Before he became ill, he played mahjong [alt: cards] with a brand friend who sold frozen chickens and ducks. This brand friend was also admitted to the hospital for pneumonia." The abovementioned employee said, the boss first The lady who got sick later became sick too. The employee said that the boss and his wife are now basically back to normal. The proprietress's symptoms were mild, and she basically did not cough at night.

Commented [26]: check translation

Commented [27]: maybe find out who that may be

### Old Gu's account

### https://archive.is/NRe08

Old Gu says "he lived in the dormitory near Tenth Street in the East District of the market" and is thus likely familiar with the vendors who played mahjong [alt: cards] there.

Original

隔离住华南海鲜市场「没感染」巡逻员揭秘:最初被感染几人特征

Commented [28]: Do we know anything more about that dormitory?

Commented [29]: I recall seeing articles from march lamenting that there were still people living in the market

### 又又瞭望

发布时间: 20-03-16

23:47

工程测量工程师,刘又薪

在这次我们所有人都没有想到这次疫情会这样来势汹汹的时候,武汉市华南海鲜市场曾被认为是新冠肺炎疫情的源头,该地区也已经休市超过2个月、进行大规模消毒。

令人惊讶的是,在本月初对华南海鲜市场进行消杀的时候发现里面居然还有住人,并且在 里面已经待超过43天,且没有感染新冠病毒。

住在里面的是一家四口,家主顾姓男子出面说明,强调他不只是从隔离开始住了43天,而是从2015年就在华南海鲜市场工作,休市后还是住在里面,并配合相关部门做巡查工作,直到本月初消毒前,都还在市场内工作。

老顾指出,他住在市场内东区十街附近的宿舍,与干儿子、干儿子的妻子、干孙子住在一起,干儿子在市场休市前,一直在里面卖米,为了维持生计,休市后替各大饭店、旅馆送米、「送的米不是商铺里的。」

至于「如何在里面生活的?」顾男说,因为他要巡逻,干儿子也要工作,休市后没地方去 ,也只能住在这边,武汉封城前,他曾在超市购买许多食物回家储备,封城后则由市场的 食堂主厨接济。

他提到,进行巡逻工作的期间,政府有配发口罩、消毒水,提供他们一家使用,他们大部分的时间窝在家里,时常会用消毒水清扫,窗户也会开着通风。

他还爆料,最初传出病例的那20几个人当中,绝大多数都是「爱打牌的」牌友,在生意不 忙的时候常常会找外地的朋友进来市场内打牌。

最初的12月份的时候,我们听到消息的时候,我们一听名字,哦,都是喜欢打牌的。 但老顾也说,这些牌友都是从外面进来的,不相信市场这里是感染源。 从老顾这个揭秘也可以充分说明,新冠肺炎确实最容易在人群聚集,空气不流通的地方高强度传播,老顾在开始没有被感染,之后市场全部清空,消杀好几次,只有他们这几个人 ,没有被感染其实也很正常。

而且12月份他们这些市场工作人员和其他门店老板也都知道,这个估计是会在人与人之间 传染的了。

只是在疫情初期,专家们了解到的情报信息也并不充分,只是发现蝙蝠和其他野生动物携带新冠病毒,而该市场又有野生动物贩卖,因此对华南海鲜市场高度怀疑。所以在最开始 我们大部分人就都把华南海鲜市场当作了这次疫情的病毒发源地。

而到今天,从一些新闻报道可以知道,至今也仅仅是怀疑,还没有确凿的证据证明这里是 源头,华南海鲜市场只能确定的说是疫情最初聚集性发病的地方。

当然,病毒源头到底是哪里,现在估计也很难查清楚,而且对有些人来说也就认定源头是 武汉了。

事到如今,只愿疫情早日结束,大家都可以恢复正常生活吧。

欢迎大家来讨论,点赞,关注!

### Translation (our emphasis)

Isolation of the "uninfected" patrol officer at the South China Seafood Market reveals the secret: the characteristics of the first few people who were infected

'Look again'

Publication time: 20-03-16 23:47

Engineering survey engineer, Liu Youxin

At this time when all of us did not expect that the epidemic would be so aggressive, the South China Seafood Market in Wuhan was once considered the source of the new crown pneumonia epidemic, and the area has also been closed for more than 2 months for large-scale disinfection.

Surprisingly, when the South China Seafood Market was killed earlier this month, it was discovered that there were still people living inside, and they had stayed in it for more than 43 days without being infected with the new crown virus.

There is a family of four. The owner of the family, Gu, came forward to explain and emphasized that he has not only lived in isolation for 43 days, but has been working in the South China Seafood Market since 2015. After the market is closed, he still lives in it and cooperates with related matters. The department did inspection work and was still working in the market until disinfection at the beginning of this month.

Old Gu pointed out that he lived in the dormitory near Tenth Street in the East District of the market, and lived with his godson, his wife, and his grandson. The godson had been selling rice in the market before the market was closed. In order to make a living, after the market was closed To deliver rice to major hotels and hotels, "The rice delivered is not from the shops."

As for "how to live inside?" Gu Nan said, because he had to patrol and his godson had to work, he had nowhere to go after the market was closed, and he could only live here. Before the city was closed in Wuhan, he used to buy a lot of food in the supermarket. Go home to reserve, and after the city is closed, the chef in the canteen of the market will take care of it.

He mentioned that during the patrol work, the government issued masks and disinfectant water for their family to use. They stayed at home most of the time, often cleaning with disinfectant water, and the windows were open for ventilation.

He also broke the news that most of the 20 or so people who first reported the case were "[mahjong?]card-loving" [mahjong?]poker players. When business is not busy, they often find friends from other places to come to the market to play mahjong [alt: cards].

In the first December, when we heard the news, when we heard the name, we all liked playing mahiong [alt: cards].

But Lao Gu also said that these mahjong friends came in from outside, and he didn't believe that the market was the source of infection.

The mystery of Lao Gu can also fully explain that the new crown pneumonia is indeed the easiest to spread in crowds and high-intensity places with poor air circulation. Lao Gu was not infected at the beginning. After that, the market was completely emptied and killed several times, only these few. It is normal for individuals not to be infected.

And in December, their market staff and other store owners also knew that this estimate would be contagious from person to person.

Only in the early stage of the epidemic, the intelligence information that the experts learned was not sufficient. It was only found that bats and other wild animals were carrying the new crown virus, and the market was selling wild animals, so the South China Seafood Market was highly suspicious. So at the very beginning, most of us regarded the South China Seafood Market as the source of the virus.

Today, it can be known from some news reports that it is only a suspicion so far. There is no conclusive evidence to prove that this is the source. The South China Seafood Market can only confirm that it is the place where the epidemic initially clustered.

Of course, it is estimated that it is difficult to find out where the virus originated, and for some people, it is believed that the origin is Wuhan.

Now that the epidemic is over, everyone can return to normal life.

Welcome everyone to discuss, like and follow!

### https://archive.is/3hplr

"Zhang Zhifeng worked in Wuhan South China Seafood Market in his early years and has now retired. After retirement, he often travels to the seafood market to chat and play [mahjong?]cards with acquaintances.

On December 13, 2019, Zhang Zhifeng developed a high fever after catching a cold."

### https://archive.is/L95tA

In an interview of a market patient published 10 days later by the same source The Paper, she mentions she did not play mahjong. It's possible this was in response to the interviewer asking her about this. All references use an ambiguous term 打牌 meaning either mahjong or cards..

### Bill Birtles's Driver's account

Bill Birtles' driver on Jan 22 mentioned the mahjong room before there was much needed coverage of it. His friend recovered. Curiously the driver's name changes in the two accounts, but it may be a pseudonym.

The Truth about China Propaganda, Patriotism and the Search for Answers. - Allen & Unwin (2021)

The seafood market was an important part of the story. An early cluster of vendors and customers emerged among the first hospital patients in December, and the suggestion that lax controls on the live animal trade were to blame made it politically explosive.

As we continued our late-night drive past the sleeping city of new buildings and highways lit up in colourful fluorescent lights, the driver chatted away, telling me he had a friend in hospital with the virus.

'He's recovering, he's doing well,' said Mr Liu. 'He says it's not too bad.'

This was rather lucky, I thought. What are the odds that you fly in and are immediately one person away from a patient in hospital?

With no time to find anyone before the morning, I asked if I could record an interview with our driver, breaking an unspoken rule of lazy journalism - 'never interview the cab driver'. But it was 11 pm and I needed something for the morning.

'How did your friend contract the virus?' I asked Mr Liu.

'He thinks it happened one night when he was playing mahjong. There were a lot of people there and the air in the room wasn't good.'

'So he doesn't think it was linked to that seafood market?'

'No. no. it was the mahiong room, he reckons.'

I then asked Mr Liu what his friend did for a crust.

'He works at the seafood market, he runs a stall there,' he said.

You couldn't make this stuff up.

His friend must have recovered well, because two days later I messaged Mr Liu to ask if his friend could accept an interview over the phone. The answer was yes, but only if I sent 500 yuan (about 100 dollars) to him first via WeChat. The virus clearly didn't sap his entrepreneurial spirit.

### ABC article using Pang rather than Liu:

https://www.abc.net.au/news/redirects/backstory/news-coverage/2020-02-02/china-correspondent-bill-birtles-on-covering-coronavirus/11919858

I ask Mr Pang does he know anyone who has the virus.

"Oh yes," he tells me, "a friend of mine is in the hospital with it."

"How's he doing?" I ask.

"Oh, not too bad, I spoke to him the other day on the phone — says he feels better but they haven't released him yet."

I ask does he know how he got it.

"He thinks he might have got it while playing mahjong, reckons the air in the room was stuffy, a lot of people in there."

Then I asked had his friend ever been to that seafood and animal market that had been identified as the initial source of the new virus.

"Oh yeah, he works there, he runs a business there," Mr Pang told me.

### Role of mahjong parlors in other superspreading events

https://www.bangkokpost.com/world/2164271/china-mahjong-dens-were-superspreader-sites-spurring-crackdown

The so-called "chess and card rooms," where hundreds of elderly gather in packed and poorly ventilated spaces primarily to play mahjong, were how a 64-year-old woman surnamed Mao spread the delta variant in the eastern city of Yangzhou, seeding the biggest single outbreak in China's ongoing wave of infections.

. . .

Mao travelled from the nearby city of Nanjing, where China's delta outbreak first started, to a relative's home in Yangzhou, where she played mahjong in several chess and card rooms before being diagnosed with Covid-19, said local media reports.

One of the rooms Mao visited had a nondescript facade and small entrance, but opened into a cavernous basement that could accommodate around 100 mahijong tables.

In the week after her diagnosis, nearly a hundred people in Yangzhou contracted the virus, 64% of whom were exposed in mahjong rooms, and nearly 70% of which are aged 60 and older.

https://spectatorworld.com/topic/china-zero-covid-strategy-being-undermined-mahjong/ Closing mahjong parlors has been a big priority

"'Those who gather together are shameless; those who play mahjong are daredevils,' reads a banner plastered across Chinese cities. 'Report mahjong houses that your parents go to"

# Specific stalls in the market - if any link multiple cases and need their own section

Who have we linked to specific market locations and how much detail do we have? Can we link cases to photos of their stalls?

Barbar's excellent site has to be in here somewhere: http://babarlelephant.free-hoster.net/visiting-the-wuhan-seafood-market/

## Suspected origins of clusters

Mahjong for the family cluster via 49M <u>DRASTIC029</u> - go to his profile for details

# Full audio transcript of video from 'The Paper' for Chen and Wei

(41M1 DRASTIC016) and Wei (57F DRASTIC040)

Original with highest resolution:

With list

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

This is an English translation of a short video (6 mins, 7 secs), filmed by a Chinese newspaper called "The Paper" (澎湃新闻, literally "Surging News"). The dates of filming are unknown, but we suspect around March 2020. The subject is the experiences of two residents of Wuhan, China, who were among the earliest to be diagnosed with COVID-19. They are identified only as Mr. Chen and Ms. Wei. They don't physically appear in the video, but their voices are dubbed over the video track as they respond to the interviewer's questions. The two are an interesting contrast; Chen had no exposure to Huanan Seafood Market, while Wei worked there as a live shrimp vendor.

The audio editing for the video is poor. The vast majority of the questions posed by the interviewer to Ms. Wei, Mr. Chen, and Chen's relatives, are edited out, so the viewer is often left with the interviewee's comments only, spliced together in a sometimes disjointed fashion, often with the first or last words cut off. Fortunately, where words are missing from the audio, the text along the bottom of the video fills in those slight gaps. The creator of the video altered the voices by increasing their pitch. In spite of these flaws and alterations, all voices are generally clear and

understandable. For any viewer that has the ability to change the audio pitch, lowering it three or four semitones will give a reasonable approximation of the speakers' true voices.

Where I have enclosed text in parentheses, it is to indicate that the narrator himself is showing parenthetical comments at the bottom of the video, or that he is using a graphic to identify who is speaking. Where I use brackets, I am indicating my own comments.

#### Translation of the Video:

(00:00) [Graphical Text]: Huanan Seafood Market, aerial view of the area; Recently, Hubei/Wuhan. The Paper. Report mailbox: baoliao@thepaper.cn

(00:10) [Ms. Wei]: I started feeling unwell from the 11<sup>th</sup>, and went to a small (clinic) and got two shots, but had no reaction to them. Over a half month I can say the most amazing thing I did was to go buy a few things at the local supermarket [she's being sarcastic]. I didn't go anywhere, you know. I really didn't go anywhere."

(00:26) [Narrator's text]: 31 Dec 2019, The Wuhan Municipal Health Commission announces the first group of confirmed new coronary pneumonia cases [COVID-19], a total of 27 people, mostly from the Huanan Seafood Market. "No obvious person-to-person transmission has been found yet." [quoting the aforementioned commission].

(00:38) [Narrator's text]: A list of the first batch of infections obtained by *The Paper* from relevant channels shows that the 27 people have no history of exposure to live poultry, (of which) 24 have a history of exposure to the Huanan Seafood Market. Four people come from the same family. December 11<sup>th</sup> was the earliest date a patient showed symptoms.

(00:54) [Narrator's text]: Who was the first Huanan Seafood Market patient diagnosed?

(1:03) [Narrator's text]: Ms. Wei operated a live shrimp business at Huanan Seafood Market. On Dec. 11<sup>th</sup>, she began to have fever symptoms, the first diagnosed patient with ties to Huanan Seafood Market. She has rented for a long time in a residential building near the market, less than 500 straight-line meters from the market. After developing symptoms, she immediately went to get medical treatment at a clinic downstairs [from her].

(1:20) [Ms. Wei]: How I got sick is like this: I felt a little tired, just like in previous years. This year I wasn't yet tired, not yet that tired. In the past, every year when winter arrived, I'd always get a little flu or something. At that time I thought it was the flu. I wasn't feeling well. I was dizzy. It felt like a very minor illness. Nothing significant was showing up. I started feeling unwell on the 11<sup>th</sup> and went to a small (clinic) and got two shots, but had no reaction to them. In the past, as soon as I felt a little unwell, I'd always immediately go get a shot. Since I have a business, I can't delay. Every time I've gotten a shot, the next day I clearly start getting better. But this time the two shots were ineffective. So I went to the Eleventh Hospital thinking I'd get a better shot there, but the doctor there didn't see me as someone famous so he gave me a pill and didn't say anything else. That took the whole day. Having to wait in line at a big hospital is a big hassle. So then I went to a small hospital to get a shot. There they gave me another two shots. He said it's "a different

medication...a different medication." I said "How is it you're giving me more shots that have no effect?" (Later on): Then I started feeling worse, no strength, couldn't keep my energy up. On Dec. 16<sup>th</sup> I then went to Wuhan Union Hospital. On the morning of the 15<sup>th</sup> I even did some business. I remember that after I got to (Union) hospital, the doctor said you're still very sick. There's also several others of you Huanan (market) folks. It's all you Huanan people. [Other sources say the doctor told her this after she regained consciousness on the 21<sup>st</sup>]. At the time I thought that was strange. What's with Huanan? What does it mean? There were a LOT of people at the hospital. Anyway from what some people I know were saying, people that had gotten shots at that little clinic – I know them – when they went to that (little clinic) there were so many people there all lining up to get shots. A lot of us Huanan folks get our shots there."

(2:41) [Narrator's text]: According to what the list [of the first group of patients, as noted above] shows, within the first group of confirmed patients linked to Huanan Seafood Market who displayed symptoms such as fever, etc, 11 of them chose to get medical help in small clinics. Feb. 23 [2020]: A reporter in the field for *The Paper* visited the living environment in the area of the Huanan Seafood Market and discovered that the clinics on the list were already closed and gone out of business. Most of them were in the old communities in the area of the Huanan Seafood Market. For example, Xinxin Clinic [鑫鑫诊所] was located on Tangjiadun Street in the Machang community, one street away from Huanan Seafood Market, mostly serving an old, low rent community. In the list of the first group diagnosed [with coronavirus], at least four people got medical help here. A notice put up in that community shows that as of noon Feb. 27 [2020], thirty people in that community had been diagnosed with coronavirus. Of those diagnosed, 11 were cured, and 3 died. And out of 55 suspected cases, 2 had died.

(3:24) [Narrator's text]: How did those who suffered serious illness but had no contact with the Huanan Seafood Market become infected? The list shows a Mr. Chen as the first person with no contact with the Huanan Seafood Market, and who developed symptoms of fever on Dec. 16<sup>th</sup>. [Under the text overlay, the video shows documents that appear to be those given to Mr. Chen upon his release from Jiangxia First People's Hospital. A doctor's name appears at the bottom of one of the documents. 田巍, Tian Wei. The phone number under the name, 87959144, is clearly a number for the Jiangxia First People's Hospital, which fits the range of numbers that appear on the hospital's website. For example, 87959138 is their "administrative consultation" phone number.] And first went to the Jiangxia People's Hospital [Wuhan Jiangxia First People's Hospital, Sixian Road, Jiangxia District] for treatment. He is introduced as being engaged in financial work

for a company that gave him no exposure to live birds or poultry. Once Mr. Chen became seriously ill, he said "Up until now I still haven't figured out how I got infected."

(3:47) [Mr. Chen]: (Voice of Mr. Chen). I had a fever on the **16**<sup>th</sup> [of December], during the day. It was probably around 10am to noon. In the beginning, when I was in the hospital (Jiangxia People's Hospital) [full name: Jiangxia First People's Hospital], if I did any strenuous exercise I'd get chest tightness and shortness of breath. You couldn't even really consider it strenuous exercise, just light [exercise]. It's like the condition you just repeated – you can feel your breathing."

(4:03) [Narrator's text]: Now, he and his family are puzzled that in the early stages of the diagnosis the family didn't do anything to protect themselves [from illness], yet as of now, no one in his family has gotten infected.

(4:11) [Chen relative #1]: When [Mr. Chen's] fever started, he wasn't with us.

(4:13) [Chen relative #2]: I was home, too, and thought, after all, we didn't do anything to protect ourselves [from infection].

(4:15) [Chen relative #1]: Right, right.

(4:16) [Chen relative #2]: I was still in contact with him, including the 120 transfer, I was in contact with him from a close distance. [This apparently refers to the ambulance transfer from Jiangxia First People's Hospital to the Wuhan Central/Wuhan Second Hospital, on Nanjing Road; "120" is the emergency number to call for an ambulance, but it's not clear who initiated the transfer, and precisely from where].

(4:22) [Narrator text]: Not only did Mr. Chen not have any contact with the Huanan Seafood Market, he lives in Jiangxia, over 30 kilometers from that market. Mr. Chen stated that for the half month prior to getting sick, aside from going to work, he didn't go anywhere else. [Begs the questions: What route did he take for his commute? By what mode of transportation? Where did he work?] Previously, the Disease Control department inquired about the trajectory of his life even back to the end of November.

(4:39) [Interviewer]: You repeatedly confirmed that you yourself had no exposure to the Huanan Seafood Market, and didn't go anywhere else.

(4:43) [Mr Chen]: Right, right, right. At the end of November [2019] I went to Mulan Mountain (木 兰山) [a scenic area about 90km north of Wuhan city]. I had no contact with birds or poultry because I don't do grocery shopping. During that time I wasn't in good health because my work unit was so busy. I take a metro [地铁] to and from work. One thing about my diagnosis is that the

greatest likelihood is that I was infected on the metro. And another possibility is that I was infected at the hospital.

(5:03) [Narrator text, repeating an earlier quote from Mr. Chen]: "For the half month before I got sick, I didn't go anywhere."

(5:09) [Narrator text]: In a situation similar to Mr. Chen's, Ms. Wei also hasn't figured out how she got infected. All the times she's thought back on her life path leading up to her sickness, other than the supermarket, market, and home, she didn't go anywhere else.

(5:21) [Ms. Wei]: (Voice of Ms. Wei). I remember that for the half month before I got sick, it seems I didn't go anywhere. I don't play mahjong. Usually, when I'm done with my business, I just go home and rest. I can say the most amazing thing I did was to go buy a few things at the local supermarket. A lot were things my daughter bought for me on the internet. I think I basically didn't go for walks anywhere. I don't think I went anywhere. (As for friends), I just chatted on the phone. We didn't get together.

(5:40) [Interviewer]: Before (you got sick) it was always you and your lover living here, right?

(5:44) [Ms. Wei]: Right.

[Interviewer]: Nothing happened to your lover?

[Ms. Wei]: No, he's fine. (In the market) the supplies [of shrimp, presumably] are all sent over by other people. Early on it was all Liangzi Lake [梁子湖] people bringing the goods. They'd directly send them over to us here and give us wholesale. Later they [the shrimp, presumably] were sent over from Jiangsu (江苏). As for selling, I sell to hotels. It's all designated clients that come to get them [buy]. I didn't go anywhere. I really didn't go anywhere.

**END OF TRANSLATION** 

Animation movie

https://weibo.com/1749990115/IAAtx74wq?refer\_flag=1001030103

An animation movie based on thepaper's video, supposed to show Wei and Chen, source unclear



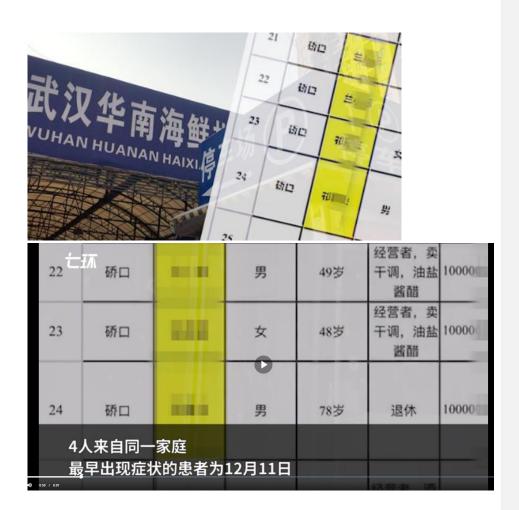
# Thepaper overlay, Partial Transcription of Patient List

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA Note: the higher res "the paper" one is the best, but omits the patient names. This version has the names and occupations of market workers.

Get Byron and Fansini's eyes on this

#	District	Sex/Age	Business at the Market				
9	江岸区	男42	售卖白条鸡				
	Jiang'an	Male	sells prepared chickens				
10	江岸区	女70	给儿子送饭				
	Jiang'an	Female	Gives food to her son				
11	江岸区	女44	售卖基围虾				
	Jiang'an	Female	Selling Jiwei Shrimp				
12	江岸区	男31	售卖甲鱼				
	Jiang'an	Male	Selling turtle				
13	江岸区	男51	售卖甲鱼				
	Jiang'an	Male	Selling turtle				

14	江岸区	男51	个体户:售 卖干鲜调料						
	Jiang'an	Male	Self-employed: selling dry and fresh seasonings						
15	江岸区	女49	个体户:售 卖干鲜调料						
	Jiang'an	Female	Self-employed: selling dry and fresh seasonings						
16	江岸区	男43	工人:配送 水产品						
	Jiang'an	Male	Worker: Distribution of aquatic products						
17	江汉区	女57	个体户:售卖虾类						
	Jianghan	Female	Self-employed: selling shrimp						
18	研口	男65	经营者,冷冻水饺						
	Qiaokou	Male	operator, frozen dumplings						
19	研口	男47	经营者,白条禽、鸡爪、猪脑						
	Qiaokou	Male	Operator, white striped poultry, chicken feet, pig brain						
20	研口	男69	采购批发者,海鲜鲍鱼 龙虾						
	Qiaokou	Male	Purchasing wholesaler, seafood, abalone, lobster						
21	研口	男50	采购经营者,各类调料						
	Qiaokou	Male	Procurement operator, all kinds of spices						
22	研口 Qiaokou	男49 Male	经营者,卖 干调,油盐 酱醋 Operator, selling dry goods and condiments, oil, salt, sauce and vinegar						
23	研口 Qiaokou	女48 Female	经营者,卖 干调,油盐 酱醋 Operator, selling dry goods and condiments, oil, salt, sauce and vinegar						
24	研口	男 78	退休						
	Qiaokou	Male	Retired						



#### Where is this list from?

It is part of the first version of thepaper's video and thumbnails on Wei and Chen, then removed in the latter versions ( <a href="https://www.thepaper.cn/newsDetail">https://www.thepaper.cn/newsDetail</a> forward 6681256 )

#### In the transcript of the video we see

(00:26) [Narrator's text]: 31 Dec 2019, The Wuhan Municipal Health Commission announces the first group of confirmed new coronary pneumonia cases [COVID-19], a total of 27 people, mostly from the Huanan Seafood Market. "No obvious person-to-person transmission has been found yet." [quoting the aforementioned commission].

(00:38) [Narrator's text]: A list of the first batch of infections obtained by *The Paper* from relevant channels shows that the 27 people have no history of exposure to live poultry, (of which) 24 have a history of exposure to the Huanan Seafood Market. Four people come from the same family. December 11<sup>th</sup> was the earliest date a patient showed symptoms.

27 is the number of cases, possibly all market related, announced by the Wuhan health commission on Dec 31

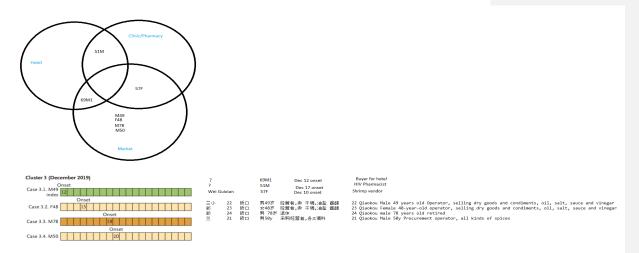
https://wjw.hubei.gov.cn/bmdt/dtyw/201912/t20191231\_1822343.shtml

But it is also the number of market related cases in the thelancet's Jinyintan paper <a href="https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext">https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext</a>

27 (66%) of 41 patients had a history of direct exposure to the Huanan seafood market.

The 41 patients are certainly the 41 PCR confirmed cases announced on Jan 11 <a href="https://web.archive.org/web/20200111031810/http://wjw.wuhan.gov.cn/front/web/showDetail/2020011109035">https://web.archive.org/web/20200111031810/http://wjw.wuhan.gov.cn/front/web/showDetail/2020011109035</a>

### ??? Overview of some important links



The China-Who report is crap - other reasons not linked directly to Chen go here, maybe repeat/summarise the Chen issues too. This might go in a separate doc to the main report but collect here for now

Attempts by the World Health Organisation (WHO) to get access to granular unfiltered data about early cases have been stymied by the Chinese authorities, despite being a basic and absolutely essential step in epidemiological tracing. Instead the limited data provided by the Chinese team about early cases is very fragmentary, when not flawed (as noted by members of the WHO including team lead Ben Embarek<sup>32</sup>).

Yet, possibly out of lack of anything better, studies continue to reuse that data at face value, but the quality and limitation warnings that seem warranted in any decent scientific publication are systematically missing. Whatever its reasons for doing so, every paper that bases itself on that very imperfect data without the necessary warnings adds a veneer of respectability to it, and may in the end be instrumental in propagating an incorrect narrative on the early spread on Covid-19 in Wuhan.

As a simple example, and amongst other cases that we cover, we shall show in this paper that the official data about the earliest official Covid-19 case in Wuhan (as provided in the China-WHO report) contains essential flaws, omissions and inconsistencies, starting with crucial errors in his date of onset and home address. Yet that data is used without questioning in key papers.

For instance Holmes et al[cite] makes key claims based on such erroneous data, presenting it in a way that might be seen as trying to mask its flaws, when the correct location of that earliest

<sup>&</sup>lt;sup>32</sup> "Dansker var chef for WHO's mission til Wuhan: - Måske er nogen slet ...." 12 Aug. 2021, https://nyheder.tv2.dk/udland/2021-08-12-dansker-var-chef-for-whos-mission-til-wuhan-maaske-er-nogen-slet-ikke-interesseret. Accessed 23 Aug. 2021.

official case would actually raise valid questions about some key statements in that paper - statements that have already being repeated in media coverage<sup>33</sup>,<sup>34</sup> as uncontested facts.

# Other - some maybe not relevant now

# 8.1 Harm already being done by Holmes et al. pre-proof

We include this here to highlight the power of a paper in a respected journal like Cell if it repeats false information.

Mainstream media are already repeating the erroneous claims of Holmes et al for public consumption: <a href="https://www.news-medical.net/news/20210820/Review-may-help-clarify-the-origins-of-SARS-CoV-2.aspx">https://www.news-medical.net/news/20210820/Review-may-help-clarify-the-origins-of-SARS-CoV-2.aspx</a>

The Wuhan Institute of Virology, often cited as the source of a lab leak, is also marked on the map, but is a distance away from the live animal markets. None of the very first documented cases—or excessive deaths within the first week of emerging—were located near the institute.

More notably this article in NPR: Even in pre-proof form the errors in this paper are having an effect on people's judgement - even a prominent scientist seems to have had his mind changed because of errors in the China-WHO report now repeated in the paper:

<sup>&</sup>lt;sup>34</sup> "Review may help clarify the origins of SARS-CoV-2 - News Medical." 21 Aug. 2021, <a href="https://www.news-medical.net/news/20210820/Review-may-help-clarify-the-origins-of-SARS-CoV-2.aspx">https://www.news-medical.net/news/20210820/Review-may-help-clarify-the-origins-of-SARS-CoV-2.aspx</a>. Accessed 23 Aug. 2021.

 $\underline{\text{https://www.npr.org/sections/goatsandsoda/2021/07/19/1016005828/new-data-leads-to-rethinking-once-more-where-the-pandemic-actually-began?t=1629640708233}$ 

What about cases near the Wuhan Institute of Virology (WIV), which is more than 10 miles from the market? "There are no cases around the WIV," Worobey says. "If the outbreak did start in the lab, the bottom line is, it would be odd for it not to be spreading from there rather than from elsewhere."

This illustrates the power of bad data to mislead and cloud judgment.

- 8.9 Maps of Selected locations of interest around Wuhan
- 8.9 Maps of Selected locations of interest around Wuhan





#### Laboratories in Wuhan involved in Bat research

- 1. The Wuhan Institute of Virology (WIV) BSL 2, BSL3 Laboratories, possibly BSL 4
- 2. A WHCDC laboratory, although most WHCDC bat coronavirus work was carried out in Beijing, according to Edward Holmes, a close collaborator with WHCDC.

- 3. Possibly at WIBP BSL3 (Wuhan Institute of Biological Products) during vaccine research, involving shared use of WIV's ABSL3 Laboratory.
- 4. Possibly at Wuhan University's "Institute of Model Animal" ABSL3

Figure: WUHAN UNIVERSITY IMA ABSL3 and Other Laboratories in Wuhan. Source: Adapted by Rodolphe deMaistre (personal correspondence)

Reproduced from https://www.researchgate.net/publication/350887648\_3\_WUHAN\_LABORATORIES\_BAT\_RES EARCH\_AND\_BIOSAFETY

#### MORE ON OTHER LABS:

#### 4.3 Lack of consideration of other labs

We know from many statements that coronavirus work including growth of live bat coronaviruses does not take place in the BSL-4 lab but typically at BSL 2 or 3[CITATIONS daszak shi, peng... many statements and journal articles].

An example quote from Zhou Peng of Shi Zhengli's group at the WIV would seem to suggest storage and amplification at BSL-2 is preferred, which would correlate with our evidence below of the BSL-3 only recently opening:

Zhou Peng said that the samples are usually stored in the second-level biosafety laboratory. If amplification is required, it must be carried out in a biosafety level 2 (P2) laboratory. Amplifying viruses is a bit like cultivating bacteria. The virus parasitizes in the cell, "feed" the cell, and the virus grows up.

Researchers found that there are always "new faces" in the different batches of samples collected in this bat cave. After five years, the viruses they obtained have converged into a big "reservoir."

There are multiple BSL 2 and 3 labs connected with groups active in bat coronavirus work in Wuhan. A detailed investigation of relevant labs can be found here and summary maps of key locations can be found in Appendix XXXXX

Concerning potential criticism of Holmes *et al.*, for omitting other labs from their map, Angela Ramussen has responded to another question she asked herself on twitter concerning the omission of other labs and the work at BSL-2 and 3 which we quote here:

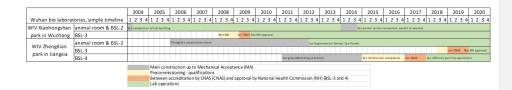
"But Angie, the WIV location on this map is the BSL-4 lab. Shi Zhengli said bat CoV work occurred at BSL-2 and BSL-3."

Clearly you've never done anything remotely close to high containment work. Every BSL-4 lab I've ever been to also has BSL-2 and BSL-3 facilities on site.

And

We also confirmed that the Shi lab is located at the BSL-4 campus, with multiple sources who have actually been to both WIV campuses and have direct firsthand knowledge of where the bat CoV work is carried out. We confirmed all locations here using GIS data from OpenStreetMaps.

Despite these assertions we have searched for evidence for which labs were open at the site. While a BSL-2 was in operation, we believe the BSL-3 lab at the WIV's Jiangxia Zhengdian site (with BSL-4) was still in the process of receiving full accreditation.



List of WIV lab accreditations and approvals:

- BSL-2 are provincial approval level
- BSL-3 and BSL-4 are national accreditation (by CNAS) and approval (by NHC)

01/06/2009 BSL-3 CNAS laboratory accreditation certificate

"http://www.whiov.cas.cn/xwdt\_160278/zhxw2019/201911/t20191111\_5429080.h

tml

https://web.archive.org/web/20161004025816/http://cfts.whiov.ac.cn/index.asp?PUM=list&tid=29"

01/12/2009 BSL-3 NHC qualification to engage in activities of highly pathogenic microorganisms

http://www.whiov.cas.cn/xwdt\_160278/zhxw2019/201911/t20191111\_5429080.ht

ml

18/06/2012 Zhengdian animal experiment center HPDST Experimental

Animal Use Permit

https://baike.baidu.com/reference/4058260/f0f7GVMrLYZAv631BumLo\_dK4VJV

g2BKEfY8q9xoit\_F3m0uWXdQvmdsFugE0s9hvNSMo1Zb99JAjHfP7tkPDYkwHtuK821 xjUedTbd6MUYcleqh2CYr832ET7WAzijxyr8

27/10/2014 Xiaohongshan ABSL-2 HPDST laboratory animal use permit

http://www.whiov.cas.cn/xwdt\_160278/zhxw2019/201911/t20191111\_5429436.ht ml

13/01/2017 Zhengdian BSL-4 CNAS National laboratory accreditation certificate https://lssf.cas.cn/lssf/whgjswaqsys/xwdt/201704/t20170419\_4527768.html

01/08/2017 Zhengdian BSL-4 NHC qualification review of the highly pathogenic pathogen experimental activities Historical Investigation on the Construction of Wuhan National Biosafety Laboratory, By Wang Yefei and Wang Dazhou (College of Humanities, Beijing, 2018)

27/11/2018 Zhengdian BSL-4 CAS construction project acceptance https://www.cas.cn/sygz/201811/t20181130\_4672588.shtml

01/12/2018 Zhengdian BSL-3 CNAS National laboratory accreditation certificate http://www.whiov.cas.cn/xwdt\_160278/zhxw2019/201911/t20191111\_5429866.ht ml

01/01/2019 Zhengdian BSL-3 CNAS National laboratory accreditation certificate https://web.archive.org/web/20200504143815/http://www.whb.cas.cn/zt/xxgzbd/dqpp/202004/t20200413\_5539070.html

07/11/2019 Zhengdian BSL-3 NHC qualification review of the highly pathogenic pathogen experimental activities

https://web.archive.org/web/20200504143815/http://www.whb.cas.cn/zt/xxgzbd/dqpp/202004/t20200413 5539070.html

As SARS like coronaviruses are to be studied in BSL-3 in China, if WIV did study SARS like coronavirus in autumn 2019, it would have been in Wuchang site, not Jiangxia site where the BSL-3 was under approval by the National Health Commission; WHO convened team did not go to WIV Wuchang site but to the WIV Jiangxia site. Did WHO convened team visited the wrong site?

Regardless, given we know multiple labs at multiple locations in Wuhan were working with live bat coronaviruses and SARS related viruses, it would seem wholly incomplete and unjustified to only consider the Zhengdian location of the WIV.

The significance of other labs has been noted by many observers, including WHO team leader Ben Embarek who was especially concerned by the move of the Wuhan CDC labs to a new location a mere ~200m from the Huanan market shortly before the pandemic outbreak

The WHO has also noted the significance of the many labs in Wuhan, as reflected in the proposed terms for their second stage investigation[Anyone got the link to the proposed terms on the WHO site - I can only find media coverage like https://www.bbc.co.uk/news/world-asia-china-57926368].



# Quay's paper about Worobey - do we have these cases in our list

https://zenodo.org/record/5717531#.YZsTDGBBxPZ

Giles made some good tweets recently

# **Investigations of Early Cases by Chinese Netizens**

Two Chinese internet users have looked into early cases. Found by @Engineer2The

#### Peng Dawei's Investigation References

Original: https://zhuanlan.zhihu.com/p/108581526

Archive: https://archive.is/k0IX8

1 https://baijiahao.baidu.com/s?id=1658437757099636183&wfr=spider&for=pchttps://archive.is/AfY2P

2 Repeat of 1

3 http://www.chinanews.com/sh/2020/02-12/9088985.shtml https://archive.is/ShXiY

4 https://www.nature.com/articles/s41586-020-2012-7

5 http://www.dhwhcs.com/news/hot/article-2142489.html

gone, not in webarchive

6 https://blog.csdn.net/woodcorpse/article/details/104085521

gone, not in webarchive

7 https://www.sohu.com/a/369224249 205720 https://archive.is/ZhRjt

8 http://hb.sina.com.cn/news/2020-01-25/detail-iihnzahk6321460.shtml

gone, not in webarchive

9 https://www.nejm.org/doi/full/10.1056/NEJMoa2001316?query=nejmyxqy

10 http://society.people.com.cn/n1/2020/0207/c1008-31575058.html https://archive.is/aV5pF

11  $\underline{\text{https://baijiahao.baidu.com/s?id=1658437757099636183\&wfr=spider\&for=pc}$   $\underline{\text{https://archive.is/AfY2P}}$ 

12 Repeat of 11

 $13 \; \underline{\text{https://baijiahao.baidu.com/s?id=1657115689164359193\&wfr=spider\&for=pc.https://archive.is/zCLq1}$ 

14 https://xw.qq.com/amphtml/20200123A065CG00 https://archive.is/4toTQ

15 https://news.ifeng.com/c/7tqe7zI5WE4 https://archive.is/WR2KD

16 https://www.sohu.com/a/371520879 347969 https://archive.is/15IN6

17 https://www.dxy.cn/bbs/newweb/pc/post/42694186?from=recommend gone, not in webarchive

18 <u>https://www.sohu.com/a/371291385\_120205726</u> https://archive.is/eiyR4

19 https://baijiahao.baidu.com/s?id=1658437757099636183&wfr=spider&for=pc https://archive.is/AfY2P

20 <a href="https://bbs.creaders.net/education/bbsviewer.php?trd">https://bbs.creaders.net/education/bbsviewer.php?trd</a> id=1500581 True Lies: From Unexplained Pneumonia to COVID-19 (Part 1), September 2020

"Sherlock Holmes King Daniel" Investigation References

Original: https://zhuanlan.zhihu.com/p/108276921

Archive: https://archive.is/RVIKz

2 https://china.caixin.com/2020-01-23/101507592.html

https://web.archive.org/web/20200123070115/https://china.caixin.com/2020-01-23/101507592.html

3

https://mp.weixin.qq.com/s?\_\_biz=MzU4MzAwNjgzNw==&mid=2247484427&idx=1&sn=fafd7a1bc904a0 4cdecbbbf4cb52a889&chksm=fdaeeb11cad96207f26a73fee0ed2d8eea73f94a4bacadc44143b7cfec05bab9fad50dc7fb07&scene=21#wechat\_redirect https://archive.is/Okonp

4 https://www.sohu.com/a/371320115 120052107 https://archive.is/lxjsS

5 https://new.qq.com/omn/20200202/20200202A0G0QX00.html https://archive.is/vXVzO

6 https://www.sohu.com/a/371520879 347969 https://archive.is/15IN6

7 https://www.sohu.com/a/372188876 260616 https://archive.is/TW8PL

8 https://www.nejm.org/doi/full/10.1056/NEJMoa2001017?query=featured home

9 https://baijiahao.baidu.com/s?id=1658437757099636183&wfr=spider&for=pchttps://archive.is/AfY2P

10 <u>https://www.sohu.com/a/371160102\_114731</u> https://archive.is/XXxBO

 $11 \ \underline{\text{https://baijiahao.baidu.com/s?id=1657115689164359193\&wfr=spider\&for=pchttps://archive.is/zCLq1}$ 

12 https://china.huanqiu.com/article/9CaKrnKp19n https://archive.is/AfhW7

13 https://www.thepaper.cn/newsDetail\_forward\_5600420

https://web.archive.org/web/20200201103107/https://www.thepaper.cn/newsDetail\_forward\_5600420\_https://archive.is/s48FT\_

Noticed by <a href="mailto:charles.rixey@rixanalytics.com">charles.rixey@rixanalytics.com</a>

Dr. Ai Fen, 艾芬, the Wuhan Whistle – Science Integrity Digest

Ai Fen describes her early patients, going back to 12/16/19. She also points out that she had sent a sample for testing on the 22nd, but her hospital administration never gave her the results. She subsequently sent another sample from another patient on 12/27, which was returned on 12/30. It was this test result that she shared with her staff that was later magnified by Li Wenliang.

#### **Wuhan Subdistrict Level Data**

A Lancet study includes subdistrict level case mapping for the duration of the Wuhan outbreak. The raw data used to compile the map is available on the sharepoint site of University of Florida Bioinformatics professor Yang Yang along with daily citywide case numbers. Notable there the total is 191 December and 264 if January 1st is included. This is the largest known number of early cases for any source. Note that this data dates from after an improbable correction that raised total deaths by exactly 50.000%. It raised global suspicion even during the credulous early period. This is an opportunity to compare before\after in detail.

	.,,
2579	4/14/2020 9:11
2579	4/15/2020 9:45
2579	4/16/2020 9:54
2579	4/17/2020 9:32
3869	4/17/2020 11:31
3869	4/17/2020 12:27
3869	4/17/2020 13:08
3869	4/18/2020 9:15
3869	4/19/2020 9:34
3869	4/20/2020 9:51
3869	4/21/2020 9:02

#### All subdistrict data is collated here:

 $\frac{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit\#gid=42973925$ 

Full Wuhan subdistrict data (after adjustment)

https://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2820%2930981-6/fulltext

Wuchang data (before adjustment):

http://rs.yiigle.com/CN112338202010/1301444.htm

Yang Yang's SharePoint site (requires Microsoft account to login): https://t.co/awVkj7oM1w

NYT description of suspicious case jump

 $\underline{https://web.archive.org/web/20200417130004/https://www.nytimes.com/2020/04/17/world/asia/chinawuhan-coronavirus-death-toll.html}$ 

#### **Military Database Potential Access**

[add more info here] A leaked Chinese database found by 100Reporters organization. Drastic needs to get a scientist with .edu .org etc email to officially request access. Described here:

#### https://100r.org/2020/05/china-coronavirus/

Journalists involved:

Maria Krol Sinclair @KrolSinclair

Former CSIS member, sounds like US security establishment person

Isaac Stone Fish @isaacstonefish

Worked for years in China, writes about untrustworthy CCP data in general and his journo friends have been getting expelled

isaacstonefish@gmail.com (will try but it's old)

#### **November Case Data**

Engineer found a higher res image of the Nov 14 and Nov 21 cases described in a Health Times article <a href="https://www.toutiao.com/a6798067606822584845/?channel=&source=search\_tab&wid=1631075683460">https://www.toutiao.com/a6798067606822584845/?channel=&source=search\_tab&wid=1631075683460</a>
Brian needs to find login to replace the blurrier image in this transcription:
<a href="https://docs.google.com/spreadsheets/d/1cfAenCjnUdx\_BTL54aewy0gRjeA6BC8BT4ov-tycjN4/edit#gid=1756416957">https://docs.google.com/spreadsheets/d/1cfAenCjnUdx\_BTL54aewy0gRjeA6BC8BT4ov-tycjN4/edit#gid=1756416957</a>

#### Chinese GitHub Data

@Engineer2the found hospital address\GPS\phone numbers in Chinese github, archived here:

https://mega.nz/file/2y5QVLQI#tau4w7WFkmlxhaX-n3bOpKoCnyXfZdM3viD034ZRQE0

Organized into a spreadsheet here:

 $\frac{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTpRb9f6UskVfKXmcSUD0Y/edit?usp=sharing}{\text{https://docs.google.com/spreadsheets/d/1jwA2RPxFYsb0DZ96CqiavaTp$ 

The geojson file in the archive has district level boundaries. You can view them against OpenStreetMap by opening it at <a href="https://geojson.io/">https://geojson.io/</a>

Convert json files to excel here  $\underline{\text{https://www.convertcsv.com/json-to-csv.htm}}$ 



This archive of csv files seems to require reversing endianess to read in Excel but doesn't appear to be more "everything but Wuhan" data:

https://mega.nz/file/Xyw22LpR#PAoVb8SPSZWnXDpZai0F3DdMYEJoNh\_yc8cRqRmUpq8

A json file contains address\coords for thousands of cases all over China except for Wuhan, which has a single prefecture level entry for 50,006 cases:

https://assets.cbndata.org/2019-nCoV/data.json

Use this converter to find unicode numbers for desired Chinese text:

https://www.online-toolz.com/tools/text-unicode-entities-convertor.php

Incredibly detailed map of every-case-in-China-except-in-Wuhan:

https://mapmiao.com/ncov/

## **Description of Dec 31 Jinyantan Hospital transfers**

Sister Wang said that his brother was transferred from Tongji Hospital, affiliated to Tongji Medical College, Tongji College, China University of Technology, to Jin Yantan Hospital at two pm on December 31, 2019, and was admitted to the fourth floor of the department. Whenever a patient is transferred from another hospital to Jin Yintan Hospital, medical staff will ask "is it a merchant in the South China Seafood Market" or has he been to the market or eat seafood in the market.

This is quite precise: 2pm on the 31st, and it is in line with the Jennifer Zeng story, where the person mentioned ambulances all day from early morning.

So clearly they moved many patients to Jinyintian that day (Jinyintian is the designated admission hospital for infectious diseases in Wuhan) - EXCEPT for some patient s that were instead moved to the PLA hospital.

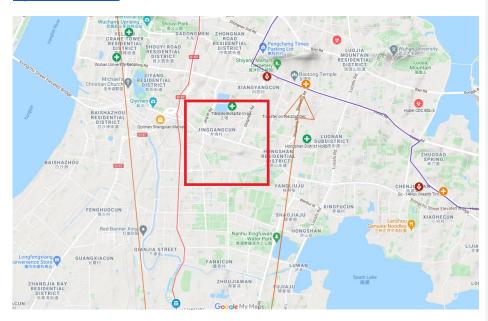
https://web.archive.org/web/20210822161620/https://www.ulabmed.com/content-270-11941-1.html

#### -Gilles Demaneuf

#### **PLA Cases Database:**

A Python help request for someone using the National University of Defense Technology database leaked to <a href="https://100r.org/2020/05/china-coronavirus/">https://100r.org/2020/05/china-coronavirus/</a>. Someone is trying to run a script querying the following area of Wuchang District (square converted to match chinese datum used by google maps, not global datum used by satellite view)

https://archive.is/VEEkV



They added a screenshot of expected output transcribed below, partially cut off on right:

#### using getInfoByAreas2/?

- ▶0: {localcity: "武汉市", ShowArea: "江宏新村小区", aid: 17466, confirm\_num: 4, suspend\_num: 4, r
- ▶1:{localcity: "武汉市",ShowArea:"长虹桥小区", aid: 11225, confirm\_num: 2, suspend\_num: 2, rec
- ▶2:{localcity: "武汉市", ShowArea: "虾湖院",aid: 4771, confirm\_num: -1, suspend\_num: 2, recover
- ▶3:{localcity: "武汉市", ShowArea: "赛宝巷5--27(单号)", aid: 10295, confirm\_num: 1, suspend\_num
- ▶4: {localcity: "武汉市", ShowArea:"中山路733--752", aid: 10296, confirm\_num: 3, suspend\_num: -
- ▶5:{localcity: "武汉市", ShowArea: "明伦小区", aid: 10297, confirm\_num: 1, suspend\_num: -1, recc
- ▶6: {localcity: "武汉市", ShowArea: "明伦横街", aid: 10298, confirm\_num: 2, suspend\_num: -1, recc
- ▶7:{localcity: "武汉市", ShowArea:"华美达安可酒店", aid: 10368, confirm\_num: 1, suspend\_num: -1

- ▶8: {localcity: "武汉市", ShowArea: "保利公园九里", aid: 11090, confirm\_num: 14, suspend\_num: 32,
- ▶9:{localcity: "武汉市", ShowArea:"天久云门", aid: 11252, confirm\_num: 6, suspend\_num: 2, reco
- ▶10: {localcity: "武汉市", ShowArea: "宁静苑", aid: 11288, confirm\_num: 1, suspend\_num: 3, recove
- ▶11: {localcity: "武汉市", ShowArea: "康乐苑", aid: 11289, confirm\_num: 7, suspend\_num: 4, recove
- ▶12: {localcity: "武汉市", ShowArea: "金秋别壁", aid: 5294, confirm\_num: 1, suspend\_num: -1, recc
- ▶13: {localcity: "武汉市", ShowArea: "南国SOHO", aid: 11914, confirm\_num: 6, suspend\_num: 2, rec
- ▶14: {localcity: "武汉市", ShowArea: "宝安花园", aid: 16492, confirm\_num: 14, suspend\_num: 2, rec
- ▶15: {localcity: "武汉市", ShowArea: "东方莱菌", aid: 16493, confirm\_num: 14, suspend\_num: 4, rec
- ▶16: {localcity: "武汉市", ShowArea:"祥和苑", aid: 16494, confirm\_num: 13, suspend\_num: 10, recc
- ▶17: {localcity: "武汉市", ShowArea: "温蓉苑", aid: 16495, confirm\_num: 3, suspend\_num: -1, recov
- ▶18: {localcity: "武汉市", ShowArea: "阳光花园", aid: 16496, confirm\_num: 1, suspend\_num: -1, rec
- ▶19: {localcity: "武汉市", ShowArea: "南大门小区", aid: 5049, confirm\_num: 7, suspend\_num: 1, rec

These are the names of communities, a subdistrict, and a hotel within the square. The only location of interest in the area is Tianyou Hospital

江宏新村小区	宁静苑
长虹桥小区	康乐苑
虾湖院	金秋别壁
赛宝巷527(单号)	南国SOHO
中山路	宝安花园
明伦小区	东方莱菌
明伦横街	祥和苑
华美达安可酒店	温蓉苑
保利公园九里	阳光花园
天久云门	南大门小区

December 16 Jiangxia Accountant Case (陈 Chen)

- -41 year old male accountant surnamed Chen.
- -Case ID is S01 = IPBCAMS-WH-03 (and probably WH19053) per Francisco
- -Shopped at an RT-Mart in Jiangxia District. A modern supermarket, not a wet market. See page 178 of WHO report. WHO team talked to him.





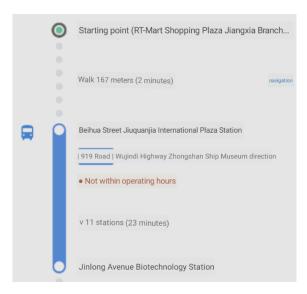
- -No contacts with Huanan Market connection per WHO report
- -Developed fever Dec. 16 most likely.
- -Initially went to First People's Hospital of Jiangxia District on Dec. 22.
- -On Dec. 27 moved to higher level Nanjing Road District of Wuhan Central Hospital for treatment. He has an acquaintance working as a doctor there.
- -A sample taken from him at Wuhan Central was first to be confirmed as SARS like Coronavirus on Dec. 30 by lab. Lab report was posted by Ai Fen and Li Wenliang leaked it on Weibo.
- -Caixin article says he lives in Wuchang. However this is the informal way of referring to any part of Wuhan east of the river, historically a separate city called Wuchang, even though formally it is in three districts with only the core area in Wuchang district. TLDR he lived in Jiangxia not Wuchang

- -His market and hospital are in Zhifang residential subdistrict, the only urbanized, residential part of the mostly rural Jiangxia. Possibly high prevalence in Zhifang was masked in district level numbers because of this
- -Some sources say Dec. 8 onset. Probably not two different people with the same name\occupation and Dec. 16 is a more likely timeline.
- Official Database had his onset date as the 8th Dec, confirmed by the team in charge of tracking early case. As per Health Times' article <a href="https://bit.ly/303Ehwo">https://bit.ly/303Ehwo</a>:

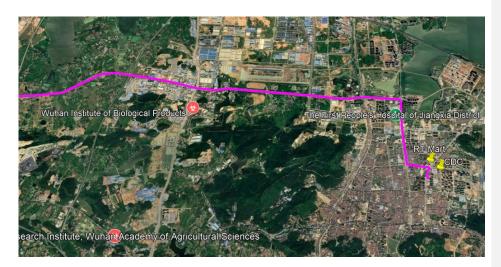
On February 26, the "Wuhan Release" online account replied to the netizen "Local Extender" that the medical treatment team of Wuhan New Coronary Pneumonia Prevention and Control Headquarters had replied:

"According to the query information system, the earliest registered and reported new coronary pneumonia patient in our city was Chen. The onset time was December 8, 2019. The patient denied having been to the South China Seafood Market."

-Zhifang subdistrict in Jiangxia is the only residential area with a direct public bus route to the new Zhengdian lab locations. Bus line 919 has a stop across from the RT-Mart that is 11 stops and 23 minutes from the lab.



-919 bus route:



-His hospital is by far the closest to Zhengdian labs.



-Jiangxia CDC is across from the RT-Mart

-A Wuchang resident living near the General Hospital of the Central Military Region (PLA owned but open to public) reported numerous ambulances with "Jiangxia District Emergency Center" 江夏区急救中 written on the side headed there on Dec. 31. He messaged this to a Taiwanese friend who posted on PPT as covered by Jennifer Zeng's program. The address of Jiangxia Emergency Center is in Zhifang but likely just ambulance dispatch site. Resident interpreted this as meaning Jiangxia's hospital was overflowing but maybe just concentrating patients at PLA hospital in the same way as others at Jinyintan.

#### Links:

- -Good Washington Post article discussing confusion of case with a Huanan vendor's <a href="https://archive.is/iNeY3">https://archive.is/iNeY3</a>
- -WHO report annex, page 178 with confusing date https://www.who.int/docs/default-source/coronaviruse/who-convened-global-study-of-origins-of-sars-cov-2-china-part-annexes.pdf

"the first known case (8 December) had no history of exposure to Huanan Market (none of the patient, family members and other contacts had history of exposure to Huanan Market). The market he visited was RT-Mart supermarket in Jiangxia District, which was more than 20km away from the Huanan Market"

-Caixin has the most detailed case history https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html

-Jiangxia ambulance activity report <a href="https://youtu.be/phtkv8ktUKc">https://youtu.be/phtkv8ktUKc</a>

-Wall Street Journal reports WHO team met him. Daszak says parents visited another market, tested negative

https://archive.is/xMlmT

A recount of someone sampling the first covid sample in the lab.

<u>Hospitalization records</u> show that Zhang Zhi was hospitalized on December 18, 2019 and was diagnosed as "community-acquired pneumonia, severe illness" on that day, while other clinical diagnoses were "respiratory failure, diabetes" and so on.

. . . .

On December 13, 19, Zhang Zhi developed a high fever after catching a cold. Although he shivered, he did not have any discomforts such as nasal congestion or runny nose or cough and difficulty breathing. Zhang Zhi went to Wuhan Central Hospital for registration in time, and took antibiotics according to the doctor's instructions for five days but **still had a high fever**. His worried wife accompanied Zhang Zhi to the emergency ward.

Yajie, director of the Department of Respiratory and Critical Care Medicine, China Resources WISCO General Hospital, Li Xin raised the CT imaging film in his hand, very surprised: "How can the lung condition be so serious." This day is December 26, 2019. After all, he was quite young, in his forties

A single-page Word document titled "<u>Statement of Fever AAA</u>", signed on December 30, 2019, recorded the visits of two patients with pneumonia in Wuhan. As of the information obtained so far, they should be the first batch of patients to be detected with pneumonia from the new coronavirus.

 $\frac{\text{https://web.archive.org/web/20210815212841/http://k.sina.com.cn/article 1648953020 624906bc00100pmjk.html https://baijjahao.baidu.com/s?id=1661578835766496388&wfr=spider&for=pc}{\text{https://baijjahao.baidu.com/s?id=1661578835766496388&wfr=spider&for=pc}}$ 

On December 13, 19, Zhang Zhifeng developed a high fever after catching a cold. 65-year-old Zhang

The first person to detect the new crown virus, who became ill in December, died 48 days later,

- 1. Zeng XX, male, 61 years old
- 2. Xiong XX, male, 69 years old, went to Wuhan Red Cross Hospital for 2 days

 $\frac{eXup36xDFxePlF4wqP5HzlsN%2A5KIARvzpUgcaNvq3niLACd%2AIAvBIv5YPoi%2AMYLW5YSvjl00d53}{NgWeAOhO4a0n1sRV7vgDaLzDsrqPtK&new=1}$ 

Wuhan Mr. Chen's mother died at 11 pm on the 21st due to pneumonia from the new coronavirus. Mr. Chen said: His mother was 63 years old and had no history of chronic illness. At the end of December, she thought it was a common cold. She didn't know it was serious until she was shocked. He lives near the seafood market and his wife is currently in isolation. ("Sichuan Daily" Weibo)

https://web.archive.org/web/20210815223110/https://mp.weixin.qq.com/s?src=11&timestamp=1629066521&ver=3255&signature=8AfdIrsaQZAdP1GZvMrAIFks5GUwfk6yHvIU4-ZzwYesd-Ig9xt3p6J0jWaIPGAbK7EWLJM%2AVPpRts4zMjl68ZqFHHA5qWLKsXTHNWhAnsRydq5Vja5M5OO4xCq-OcAS&new=1

Wang Liwei (pseudonym) is an operator of the South China Seafood Market and one of the first 7 infected persons. His wife and sister-in-law were also diagnosed with new coronavirus infection in this epidemic.On January 5, Wang Liwei's wife came to Jinyintan Hospital and insisted on being hospitalized. Zhang Dingyu looked at her lung CT and found that although there were shadows, the symptoms were mild. It is recommended to cooperate with medicines and isolate them at home for recuperation. Everyone wears a mask at home, and the meal system is implemented. Two weeks later, her blood picture returned to normal with the help of immunity and drugs, and the pneumonia resolved on its own.

https://web.archive.org/web/20210816164211/https://mp.weixin.qq.com/s?src=11&timestamp=1629131915&ver=3256&signature=pk5w-i4XhOT1AbyY0%2AyDHnY-

X6bY7%2A%2A3GRCQ22clJBrHUqGPt76NGeXL6vJc74QunUVU0SfvkE0vmbxAopPdqWP7JkaqNw%2Aq%2AlpJf1q5JgRu5JCrWuqHp43ahCbhKzw8&new=1

Dr. Wu Wenjuan, Director of ICU (Department of Intensive Care Medicine), Wuhan Jinyintan Hospital

https://m.weibo.cn/status/4486816184909111

The weibo patient list

https://news.ifeng.com/c/7tgI2L1gI3w

Close contact - contact tracing

https://image.baidu.com/search/detail?ct=503316480&z=0&ipn=d&word=%E5%AF%BB%E6%89%BE%E6%AD%A6%E6%B1%89%E5%8D%8E%E5%8D%97%E6%B5%B7%E9%B2%9C%E5%B8%82%E5%9C%BA%E7%AC%AC%E4%B8%80%E4%B8%AA%E6%84%9F%E6%9F%93%E8%80%85&step word=&hs=0&pn=843&spn=0&di=86350&pi=0&rn=1&tn=baiduimagedetail&is=0%2C0&istype=0&ie=utf-

#### 8&oe=utf-8&in=&cl=2&lm=-

 $1\&st = undefined\&cs = 3727579712\%2C1137175728\&os = 1266211828\%2C2951674794\&simid = 81770424\%2C899729880\&adpicid = 0\&ln = 1021\&fr = &fmq = 1629167437349 R&fm = &ic = undefined\&s = undefined&height = undefined&latest = undefined&copyright = undefined&se = &sme = &tab = 0&width = undefined&height = undefined&fined&ist = &jit = &cg = &bdtype = 0&oriquery = &objurl = https://3A\%2F\%2Fgimg2.baidu.com%2Fimage_search%2Fsrc%3Dhttp%3A%2F%2Fimg1.17img.cn%2F17img%2Fimages%2F202002%2Fuepic%2Fd4dfe5aa-5675-48a6-9136-$ 

08baf137addb.jpg%26refer%3Dhttp%3A%2F%2Fimg1.17img.cn%26app%3D2002%26size%3Df9999%2 C10000%26q%3Da80%26n%3D0%26g%3Don%26fmt%3Djpeg%3Fsec%3D1631760087%26t%3D2901 1eabc28129f6d5239db08434a11f&fromurl=ippr z2C%24qAzdH3FAzdH3Fooo z%26e3Btgfp674jgp z%2 6e3Bv54 z%26e3BvgAzdH3Fgjpfi5oAzdH3FSH8a9nb9AzdH3Fgjof\_cd88cd\_z%26e3Bip4&gsm=34c&rps\_tart=0&rpnum=0&islist=&querylist=&nojc=undefined

Test result data for early patients?

https://web.archive.org/web/20210817025704/https://www.cnhtl.com/32749.html Early article on market outbreak and patient info.

#### https://www.thepaper.cn/newsDetail forward 6681256

The original patient seafood market early cases

#### https://mega.nz/file/3rY0wRpl#JQKAS3WxlrmbgQjlGHoiSu40o1lOtq0dRjcl0KlwCw4

The Chen video archived.

#### https://mega.nz/file/XjgnBaRI#D7KnmlTp07rskC9RjUiisCK3aKJley4SHTmm85N6hQc

Ms. Huang's husband used to go to the South China Seafood Market to pick up goods. She developed symptoms such as coughing around December 24. The family treated her as a cold, and her symptoms worsened in the later stages. She was admitted to Tongji Hospital first and transferred to Jinyintan. The patient is currently cured and discharged.

# Discharged

jan

15

# The sina video link for the paper article of early market patients - archive

https://mega.nz/file/iuhlnSjC#ky6DfxtsHi-z\_uzQubdMd6yhX8yn6xPeugpzqb8ldpA

Note: the higher res "the paper" one is the best, but omits the patient names. This version has the names and occupations of market workers.

https://web.archive.org/web/20210811211219/http://www.hbcdc.cn/index.php/index-view-aid-8261.html 2020-01-30

[Wuhan] Departed employees return to the battlefield: One day disease control people, one life disease control soul

Chen - early dec8 link

https://www.toutiao.com/a6903473200500326916/?channel=&source=search\_tab https://web.archive.org/web/20210823165213/https://www.toutiao.com/a6903473200500326916/?channel=&source=search\_tab&wid=1629737533251

https://mega.nz/file/f2pQRCSI#j-voquYZBSbSpI\_skfOfN78XlzKH2vHa-XWsJ4FYQiU

# Cases from Interview with Zhang Jixian from Hubei Provincial Hospital of Integrated Chinese & Western Medicine

#### Video

CGTN video (short version): https://www.youtube.com/watch?v=U6zyYNT-RK0

Full 29 minute video from CGTN

https://www.youtube.com/watch?t=1361&v=jUHiQRJiOSQ&feature=youtu.be

and "T-House": https://www.youtube.com/watch?v=Dkyi7h4LHY4

December 2019 Wuhan Case File: <a href="https://www.youtube.com/watch?v=f5p455bFe7g">https://www.youtube.com/watch?v=f5p455bFe7g</a>

Dr. Li Wenliang was not the whistleblower, Zhang Jixian was! Here is why! https://www.youtube.com/watch?v=Dkyi7h4LHY4

The Point: How were the first-reported COVID-19 cases dealt with by Wuhan?

https://www.youtube.com/watch?v=U6zyYNT-RK0

Consultation records of the first 7 cases of new coronary pneumonia in Wuhan exposed for the first time 2020-04-19

http://www.jwview.com/jingwei/html/04-19/312283.shtml

Video: <a href="http://video.chinanews.com/flv/2020/0419/qige.mp4">http://video.chinanews.com/flv/2020/0419/qige.mp4</a>

Archived: <a href="https://archive.ph/xIET4">https://archive.ph/xIET4</a>

## **Attempted Transcription**

Transcription of cases from unblurred frames. One is subject of the case report, 6 are a handwritten table in lower right of first sheet of the report.

Strong Guesses Only						- 11	Francis Tables	co C	ross-Tal	b With					
#	Name	Age	Sex	Patient ID	Source	-		Age	Sex	ID	CN- WHO	ICU JYT	WIV	Zhou admission	Zhou onset
0	高XX	40	М	452551	Subject		4	40	М	452551	-	ICU-05	WIV03	27-Dec-19	17-Dec-19
1	刘XX	52	F	452354	Table		į	52	F	453354	S11	ICU-08	WIV05	29-Dec-19	22-Dec-19
2	X书勤	49	F	452133	Table		4	49	F	452735	S10	ICU-06	WIV04	27-Dec-19	23-Dec-19

3	胡笔X	40	М	452837	Table			40	М	452837	S12	ICU-09	WIV06	28-Dec-19	22-Dec-19
4	X强	52	М	452509	Table			32	М	453509	S04	ICU-04	WIV02	29-Dec-19	19-Dec-19
5	XXX	62	F	452?43	Table			62	F	452543	-		-		
6	张X洲	62	М	452544	Table			62	М	452544	S13	ICU-01	WIV01	27-Dec-19	12-Dec-19
We	eaker Gu	esses	Incl	uded											
#	Name	Age	Sex	Patient ID	Source	Notes	-								
0	高楚君	40	М	452551	Subject										
1	刘XX	52	F	452354	Table										
2	X书勤	49	F	452133	Table										
	胡(笔,				Table										
3	克) 代	40	М	452837	Table										
4	张强	52	М	452509	Table										
5	xxx	62	F	452?43	Table	Not 胡,张,高									
6	张X洲	62	М	452544	Table										

# **Consensus Transcription**

= guess

= guess based on independent evidence

Bed #	Name:	sur	name   giv	M\F	Age	Hospital #					
Subject of record (market):											
19床 姓名 高 <mark>楚,觉 君,子</mark> 男 40y 452551											
	Table of other cases added to record (1-3 market,4-6 non market cluster):										
16床	姓名	刘	爱	<mark>秋</mark> ,环	女	52y	452354				
18床	姓名	九	书	勤	女	49y	452133				
20床	姓名	胡	笔, 克, 王	代, 砚, 孔	男	40y	452837				
21床	姓名	张	强		男	3 <mark>5</mark> y	452509				

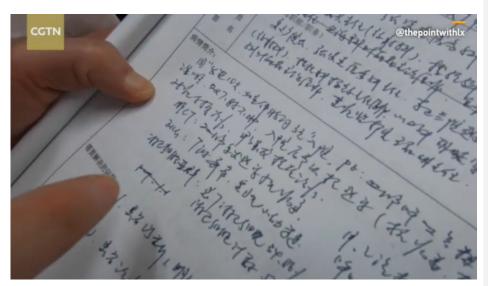
225	₹	姓名	李	<mark>小</mark> , <mark>生</mark>	<mark>路</mark> , <mark>婷</mark>	女	62y	452543
235	ŧ	姓名	张	<mark>志</mark>	洲	男	62y	452544

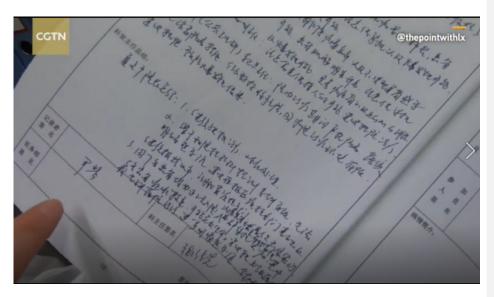
\* 姓

written

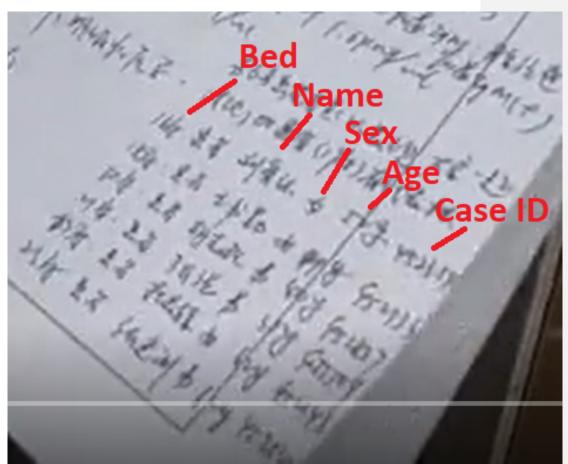
as 生

Guancha video (clear views of ID numbers): <a href="https://www.guancha.cn/politics/2020\_04\_19\_547416.shtml">https://www.guancha.cn/politics/2020\_04\_19\_547416.shtml</a>





Format of table for 6 cases. A seventh is the actual case subject with ID info at top of sheet.



https://www.youtube.com/watch?v=jUHiQRJiOSQ&t=1390s and https://www.thepaper.cn/newsDetail forward 7045930

## Archived with all comments here:

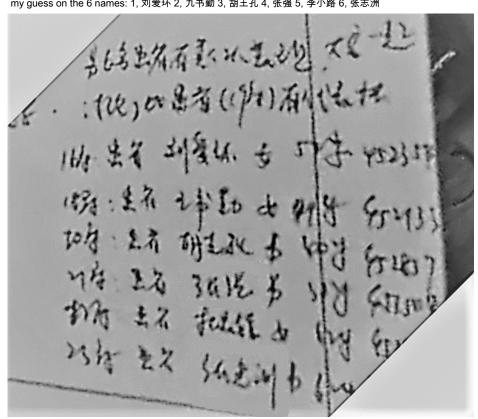
https://archive.ph/Kgmvu

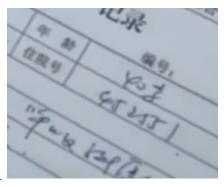
## Compare to Nature tables:

https://www.nature.com/articles/s41586-020-2012-7/tables/1https://www.nature.com/articles/s41586-020-2012-7/tables/2

Rodolphe de Maistre:

my guess on the 6 names: 1, 刘爱环 2, 九书勤 3, 胡王孔 4, 张强 5, 李小路 6, 张志洲





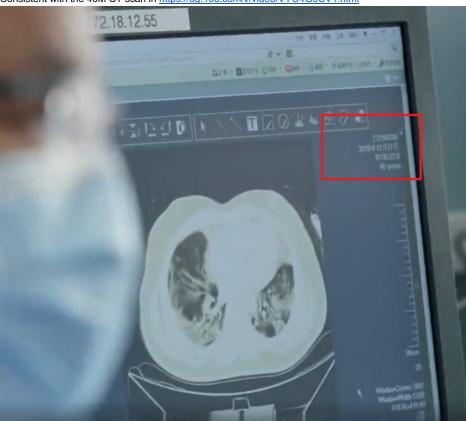
40yo at <a href="https://youtu.be/jUHiQRJiOSQ?t=1361">https://youtu.be/jUHiQRJiOSQ?t=1361</a>

This 40M1 at the top of the page, "the 4th case" (by admission?) is in the most critical condition (typical case) and worked in market, selling frozen food, like poultry. <a href="https://youtu.be/jiUHiQRJiOSQ?t=1517">https://youtu.be/jiUHiQRJiOSQ?t=1517</a>
The 40M1 from the WIV paper was more severe than the 40M2, and was admitted one day before. <a href="https://www.nature.com/articles/s41586-020-2012-7/tables/1">https://www.nature.com/articles/s41586-020-2012-7/tables/1</a>

From <a href="https://lujuba.cc/en/230540.html">https://lujuba.cc/en/230540.html</a> discussing this video

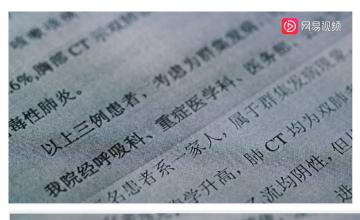
In the "Introduction" column, read: "Fever for 10 days with aggravation for 3 days in the hospital, with thick breathing in both lungs, wet rales in the left lower lung, and no swelling of the lower extremities. Anti-infection (anti-viral, anti-swelling) Bacteria) symptomatic treatment. CT of the lungs showed multiple infectious lesions in both lungs, with ground glass shadows.

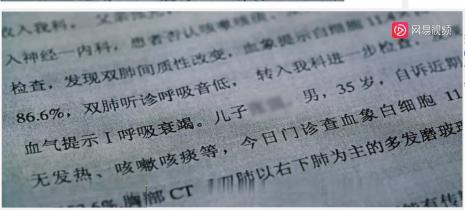
This fits well with 40M1 onset Dec 17 admission Dec 27 and transferred to Jinyintan on Dec 29



Consistent with the 40M CT scan in <a href="https://3g.163.com/v/video/VYO4G9UV1.html">https://3g.163.com/v/video/VYO4G9UV1.html</a>

On other hand the 32M should be instead the son 35M





这三例患者体内没有发现常见病毒



A bit guessy but according to Brian and Rodolphe and cursive fonts in <a href="http://www.ziti88.com/">http://www.ziti88.com/</a> The case #3 (40M?) in Zhang Jixian's list could be

# 胡克砚



This is the name of the owner of a Mushrooms stall

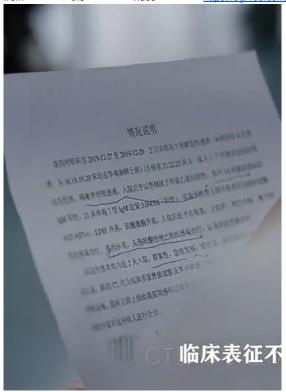
https://aiqicha.baidu.com/company\_detail\_14831321575638

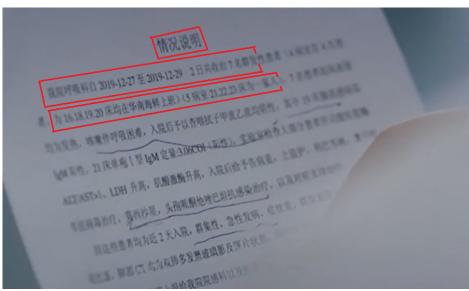
Which is positive on the WHO map, onset the week of Dec 27, so it could be 40M ICU-09 in the WIV paper. The mushroom stall (unambiguous because it is the neighbor of a positive vegetable stall) is mentioned in <a href="https://archive.ph/wqtCY">https://archive.ph/wqtCY</a>

Zhang Jixian's description of mother\father\son case from a few days earlier: <a href="http://www.xinhuanet.com/english/2020-04/16/c">http://www.xinhuanet.com/english/2020-04/16/c</a> 138982435.htm

See also p.504 of the "Tracing early cases" twitter chat archive <a href="https://mega.nz/file/ohZyXZQY#icK7JtHSrTvHnrdAoeEzmJb-p5ZARGHMpg8i1Z9tMXI">https://mega.nz/file/ohZyXZQY#icK7JtHSrTvHnrdAoeEzmJb-p5ZARGHMpg8i1Z9tMXI</a> For the discussions on deciphering these Zhang Jixian handwritten documents.

from the video <a href="https://3g.163.com/v/video/VYO4G9UV1.html">https://3g.163.com/v/video/VYO4G9UV1.html</a> 2:53





Brian: For title and lines 1-2 I get:

#### 情况说明

我院呼吸科自2019-12-27至2019-12-29 2日共收治7名期限...

...为 16.18.19.20 床均在华南海鲜上班)(5 病室21.22.23 床为一家人...

#### "FACT SHEET"

"From 2019-12-27 to 2019-12-29, the respiratory department of our hospital admitted a total of 7 patients...beds 16, 18, 19, and 20 all work in South China Seafood) (5 wards beds 21, 22, and 23 are all family members..."

Zhang Jixian's handwritten list has beds 16, 18, 20 for patients 52F, 49F, 40M2, bed 19 for 40M1, and beds 21-23 for the cluster 1 family.

(this is confirming what we already knew from Zhang Jixian's interviews and the WIV paper)



Xinhua Headlines: Chinese doctor recalls first encounter with mysterious virus

Source: Xinhua| 2020-04-16

#### http://www.xinhuanet.com/english/2020-04/16/c\_138982435.htm

本文转载自微信公众号"科技日报"(ID:kjrbwx) ,原文首发于2020年4月19日,原标题为《武汉最 初7例病例会诊记录首次曝光!张继先公开回应质 疑!》,不代表瞭望智库观点。

"疫情上报第一人"张继先

报告的最初7名新冠肺炎病例

首次会诊记录,

近日第一次曝光!

时隔三个多月,

张继先首次打开档案柜,

This article was reproduced from the WeChat public account "Science and Technology Daily" (ID: kjrbwx). The original text was first published on April 19, 2020. The original title was "The first seven cases of consultation records in Wuhan were exposed for the first time!" Zhang Jixian publicly responded to doubts! ", does not represent the views of the Liaowang think tank.

"The First Person to Report the Epidemic" Zhang Jixian

The first 7 reported cases of new coronary pneumonia

Records of the first consultation,

The first exposure recently!

After more than three months,

Zhang Jixian opened the filing cabinet for the first

#### 展示了多部门专家

对这些病例的初次诊断意见

 $\downarrow \ \downarrow \ \downarrow$ 

1

最初最重要的一病例会诊记录写了什么?

在张继先展示的一份会诊记录中,该患者入院时间 为2019年12月27日,会诊时间为12月29日,会诊 主持人是张继先和湖北省中西医结合医院夏文广院 长,参加的有10个部门的人。

该病例"病情简介"一栏写着:"发热10天伴加重3天入院,双肺有呼吸音粗,左下肺有湿罗音,双下肢不肿。入院后给予抗感染(抗病毒、抗细菌)对症治疗。肺部CT显示双肺多发感染性病变,有毛玻璃影。甲流乙流抗体阴性,呼吸道五项病原学检查也是阴性……"

张继先介绍,这个病例是第4个病例,华南海鲜市 场卖冻品的商户。他是最重的一个,也最具有典型 性。除这个病例外,其他6人有类似症状。

2

当时想到疫情会这么严重吗?

回头看新冠肺炎疫情,张继先表示,当初只觉得它 可能是传染病,但没想到像现在这样传染性这么强 、流行范围这么广、病情这么严重。

3

专家会诊上报区疾控中心后,反应如何?

张继先表示,区疾控中心反应还是挺迅速的。12月 27日中午上报,当天下午就来做流调,同时采集了 病人的血液和咽拭子。12月29日再报的时候,他们 time.

Multi-sectoral experts

Initial diagnosis opinions on these cases

 $\downarrow \; \downarrow \; \downarrow$ 

1

What was written in the first most important case consultation record?

In a consultation record displayed by Zhang Jixian, the patient was admitted to the hospital on December 27, 2019, and the consultation time was on December 29. The host of the consultation was Zhang Jixian and the director of Hubei Integrated Traditional Chinese and Western Medicine Hospital Xia Wenguang. 10 People in each department.

The "Introduction" column of the case reads: "Fever for 10 days with aggravation for 3 days was admitted to the hospital, with thick breath sounds in both lungs, wet rales in the left lower lung, and no swelling of the lower limbs. After admission, he was given anti-infection (anti-viral, anti- Bacteria) symptomatic treatment. CT of the lungs showed multiple infectious lesions in both lungs, with ground glass shadows. Negative antibodies for influenza A and B, and five pathogenic examinations of the respiratory tract were also negative..."

Zhang Jixian introduced that this case is the fourth case, a merchant selling frozen products in the South China Seafood Market. He is the heaviest and the most typical. Except for this case, 6 other people have similar symptoms.

2

Did you think that the epidemic would be so severe?

Looking back at the new crown pneumonia epidemic, Zhang Jixian said that at first he only thought it might be an infectious disease, but he did not expect it to be as infectious as it is now, with such a wide range of epidemics and such a serious condition.

3

又来了,同样采集病人的血液并询问病史。"我觉得 他们反应还是挺及时的。"

4

专家都说了有人传人危险,是否应更早告诉大众?

张继先表示,对疾病的认识都有一个过程,事情没 完全弄清楚的时候,不能说太多。如果是做科研, 在结论出来前怎么跟大众说?这个事情要有个科学 谨慎的态度。 What was the response after the expert's consultation and reporting to the district CDC?

Zhang Jixian said that the district CDC responded very quickly. The report was reported at noon on December 27, and the patient's blood and throat swabs were collected in the afternoon that day. When they reported again on December 29, they came again, collecting the patient's blood and asking about the medical history. "I think they responded in a timely manner."

1

Experts have said that it is dangerous for someone to pass from person to person. Should we tell the public earlier?

Zhang Jixian said that there is a process for understanding the disease. When things are not fully understood, one cannot say too much. If you are doing scientific research, how can you tell the public before the conclusion comes out? This matter requires a scientific and cautious attitude.

The consultation records of the first 7 cases in Wuhan were exposed for the first time! Zhang Jixian publicly responded to doubts!

This article is reproduced from the WeChat public account "Science and Technology Daily" (ID: kjrbwx). The original text was first published on April 19, 2020. The original title was "The first seven cases of consultation records in Wuhan were exposed for the first time!" Zhang Jixian publicly responded to doubts!

https://finance.sina.cn/2020-04-19/detail-iirczymi7224175.d.html

CANNOT OPEN THIS: <a href="http://jwview.com/jingwei/html/04-19/312283.shtml">http://jwview.com/jingwei/html/04-19/312283.shtml</a> [Brian] Others have trouble as well but youtube links above are better anyway

#### Conclusion

Wang Wenyong from Jianghan CDC went two times to Integrated, on Dec 27 for 4 patients and on Dec 29 for 7.

6 were transferred to Jinyintan that day (all but the son 35M) http://news.china.com.cn/2020-04/02/content 75889879.htm https://www.nature.com/articles/s41586-020-2012-7/tables/1 includes 5 of the 7 Zhang Jixian patients, the two remaining ones are 62F and 35M admitted on Dec 27.

Patient No.	Gender	Age	Date of Onset	Date of Admission	Symptoms When Admitted	Current Status (2020.01.13)	Diagnosis history
ICU-01*	Male	62	2019.12.12	2019.12.27	fever	recover, discharged	negative
ICU-04	Male	32	2019.12.19	2019.12.29	fever, cough, dyspnea	fever, intermittent cough	negative
ICU-05	Male	40	2019.12.17	2019.12.27	fever (38 °C), expectoration, malaise, dyspnea	fever, malaise, intermittent cough	AdV (IgM)
ICU-06	Female	49	2019.12.23	2019.12.27	fever (37.9 °C), palpitation	fever, malaise, cough	Coronavirus (nt)
ICU-08	Female	52	2019.12.22	2019.12.29	fever (38.5 °C), expectoration, malaise, dyspnea	recover, discharged	Streptococcus pneumoniae (n
ICU-09	Male	40	2019.12.22	2019.12.28	fever (38.5 °C), expectoration	fever (38.5 °C), malaise, expectoration, dizziness	negative
ICU-10	Male	56	2019.12.20	2019.12.20	fever, dyspnea, chest tightness	fever, malaise, cough, dyspnea	negative

plus 62F and 35M on Dec 27 = Zhang Jixian 7 patients

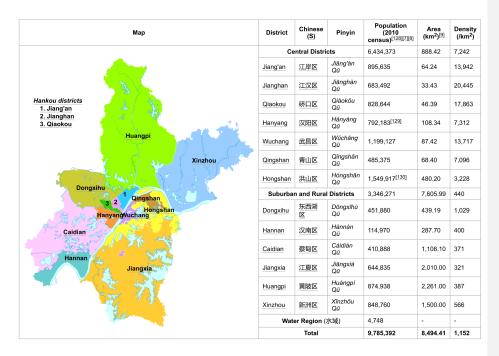
# Let's not forget the PLA Hospital of Central Military Command:

Phylogenetic Name	Virus Name	GISAID Accession Number	Lineage	Gender/ Age	Collection Date	Specimen Source	Originating Laboratory	Address	Comment
PLA Hospital - Patient 1	hCoV-19/Wuhan/WH01/2019	EPI_ISL_406798	B (L)	M/44 Y	26-Dec-19	Bronchoalveolar Lavage	Theater Command of People's	NO. 627 Wuluo Road, Wuchang District, Wuhan	29,866 nt genome; missing 1-25 of 5' UTR
PLA Hospital - Patient 2	hCoV-19/Wuhan/WH02/2019	EPI_ISL_406799	B.1.1 (O)	M/43 Y	31-Dec-19	Bronchoalveolar Lavage	Theater Command of People's	NO.627 Wuluo Road, Wuchang District,	29,388 nt genome; Long stretches of NNNs (34.45% of overall sequence). Gap of 13 nucleotide(s) found at refpox 26171 (FRAMESHIFT). Gap of 13 nucleotides when compared to the reference sequence. 0.40% Unique Mutations.
PLA Hospital - Patient 3	hCoV-19/Wuhan/WH03/2020	EPI_ISL_406800	B (L)	F/21 Y	01-Jan-20	Bronchoalveolar Lavage	General Hospital of Central Theater Command of People's Liberation Army of China	NO.627 Wuluo Road, Wuchang District, Wuhan	29,868 nt genome
PLA Hospital- Patient 4	hCoV-19/Wuhan/WH04/2020	EPI_ISL_406801	A (S)	M/39 Y	05-Jan-30	Bronchoalveolar Lavage	Theater Command of People's	NO.627 Wuluo Road, Wuchang District, Wuhan	29,972 nt genome
Reference Genome	Severe acute respiratory syndrome coronavirus 2 isolate Wuhan-Hu-1, complete genome	NCBI Reference Sequence: NC_045512.2		M/41	26-Dec-19	Bronchoalveolar Lavage	The Central Hospital of Wuhan	Wuhan, China	29,903 nt genome
GISAID - Patient 1	hCoV-19/Wuhan/IPBCAMS- WH-01/2019	EPI_ISL_402123	B (L)	M/65	24-Dec-19	Bronchoalveolar Lavage	Institute of Pathogen Biology, Chinese Academy of Medical Sciences & Peking Union Medical College	Beijing, China	29,899 nt genome

• This is just here to make sure not missing data

# A.1 Districts of Wuhan

It will aid the reader to be familiar with the location of certain districts of Wuhan. A map of the districts is shown below.



#### Of particular significance are:

- Jiang'an district (1 on map) in central Wuhan with highest population density and the location of the first identified superspreading event at the Hua'nan seafood market.
- Jiangxia district (large orange southern district) is further out from the centre and of lower
  population density. It is home to both the official first case Mr. Chen and the Wuhan
  Institute of Virology's southern location.
- Wuchang district (purple); its location south of the river will be relevant.

#### 'Wuchang' in colloquial use

It will also be relevant to consider that in common usage 'Wuchang' is used by Wuhan residents to refer to the region encompassing all districts south of the river<sup>35</sup>, including Jiangxia, similarly the region North of the river is often referred to as 'Hankou'. The regions are even labelled this way on the official Wuhan metro map (Appendix XXXXX).

<sup>&</sup>lt;sup>35</sup> https://zh.wikipedia.org/wiki/%E6%AD%A6%E6%98%8C%E5%8C%BA

List of all Wuhan administrative divisions in 2019:

http://www.stats.gov.cn/tjsj/tjbz/tjyqhdmhcxhfdm/2019/42.html

# 8.10.2 Map of the Wuhan Metro system



Note also

the use of the colloquial nomenclature for the regions of Wuhan: Hankou for the North and Wuchang for south of the river. Mr. Chen's likely local stop would be Zhifang Avenue at the penultimate southern stop on line 7 (orange) highlighted below



# About general knowledge by mid december of a novel coronavirus in Wuhan:

- 1. In mid-December, Lawrence Gostin, a professor of global health law at Georgetown Law, had a guest over to dinner. "I just heard from a friend in Wuhan that there is a novel coronavirus, and it looks very serious," Gostin remembered saying. "He just said, 'Pass the biscuits.' "Few people grasped the potentially catastrophic implications of an outbreak in China. <a href="https://www.latimes.com/california/story/2020-04-12/coronavirus-attention-impeachment-primaries-kobe">https://www.latimes.com/california/story/2020-04-12/coronavirus-attention-impeachment-primaries-kobe</a>
- 2. Spike Lee documentary:

Ian Lipkin—Columbia virologist—saying he first heard about the outbreak on



3. From nbcnews, we know that communication and image intelligence was collected by the NCMI in Nov 19 and circulated simply as a 'situation report' that month, before it made it an assessment in December 19, once it had been interpreted.

As the <u>nbcnews article</u> states:

"there was intelligence that caught the attention of public health analysts and fueled formal assessments that were written in December."

The Washington Times reported that the DIA was the IC element that was moderately confident of a lab leak. They were looking at patterns of lifes in Wuhan hospitals and detected something back in Nov.

https://www.washingtontimes.com/news/2021/sep/1/dia-leads-lab-leak-theory/

'Sources said the Defense Intelligence Agency is the one agency that firmly believes in the lab leak theory. According to one source, the DIA's confidence is based on work with a little-known institute under its control called the National Center for Medical Intelligence, **NCMI**, which was renamed in 2009 from the Armed Forces Medical Intelligence Center.'

# Francisco says: Reminder: first 17 official deaths (ordered by age): Yin 殷 Lei 雷 Zeng 曾 Zhou 周 Luo 罗 Li 李 Xiong 熊 Yuan 袁 Hu 胡 Zhang 张 Zhang 张 Liu 刘 Zhan 詹 Wang **王** Wang 王

# DRASTIC060 --- Template to copy/paste for new cases

 $\begin{array}{lll} \mbox{Age\&Sex} & \mbox{89M} \\ \mbox{Chinese name} & \mbox{$\pm$XX} \\ \mbox{Name} & \mbox{XX Wang} \\ \end{array}$ 

Type -Wet market -

Chen 陈

Onset 1st Admission Discharged Death Υ Hospital Dec 31st Lineage Cluster 1st 27 JYT 2nd 41 JYT CN-WHO **ICU JYT** WIV IPBCAMS-WH-HBCDC-HB-WH IME-WH **IVDC** WH190 WHU Other Genbank **GISAID** GW NMDC **CNGB** BioProject SRP/CRA SRR/CRR SAM Notes 2019-12-01 2019-12-02 2019-12-03 2019-12-04 2019-12-05 2019-12-06 2019-12-07 2019-12-08 2019-12-09 2019-12-10 2019-12-11 2019-12-12 2019-12-13 2019-12-14

2019-12-15	-
2019-12-16	-
2019-12-17	-
2019-12-18	-
2019-12-19	-
2019-12-20	-
2019-12-21	-
2019-12-22	-
2019-12-23	-
2019-12-24	-
2019-12-25	-
2019-12-26	-
2019-12-27	-
2019-12-28	-
2019-12-29	-
2019-12-30	-
2019-12-31	-
2020-01-01	-
2020-01-02	-
2020-01-03	-
2020-01-04	-
2020-01-05	-
2020-01-06	-
2020-01-07	-
2020-01-08	-
2020-01-09	-
2020-01-10	-
2020-01-11	-
2020-01-12	-
2020-01-13	-
2020-01-14	-
2020-01-15	_
2020-01-16	_
2020-01-17	_
2020-01-18	_
2020-01-19	_
2020-01-20	_
2020-01-21	_
2020-01-22	-
2020-01-23	_
2020-01-24	_
2020-01-25	-
2020-01-26	_
2020-01-27	_
2020 01 21	

2020-01-28 -2020-01-29 -2020-01-30 -2020-01-31 check -

### Linked cases:

# References for the above summary:

NHC - National Health Commission

 $\frac{http://www.nhc.gov.cn/xcs/yqtb/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml}{https://archive.vn/gkpzs}$ 

三、王XX,男,89岁,既往有高血压、脑梗塞、脑软化病史。因尿失禁于2020年1月5日就诊于同济医院泌尿外科,1月8日因嗜睡、神志不清转入急诊科就诊。检查提示肺部感染(病毒性肺炎)、急性呼吸衰竭。1月8日体检发现患者77mmHg,有缺氧表现。肺部CT呈双肺斑片影,双侧少量胸腔积液,胸膜粘连。血常规示白细胞总数进行性增高,淋巴细胞计数低。1月9日转入发热门诊观察病房抢救治疗,给予对症支持治疗。1月13日予呼吸机辅助正压通气。1月14日出现昏睡,在呼吸机辅助通气下,血氧饱和度波动在50%-85%之间。1月15日收入感染科病房。1月18日10时30分转院前Bp140/78mmHg,无创呼吸机辅助通气下SPO2 85%。转运途中,患者出现呼吸心跳骤停,持续抢救2小时,治疗无效于2020年1月18日13时37分宣告临床死亡。

#### Translation

3. Wang XX, male, 89 years old, has a history of hypertension, cerebral infarction, and encephalomalacia. He was admitted to the Department of Urology, Tongji Hospital on January 5, 2020 due to urinary incontinence, and was transferred to the emergency department on January 8 due to lethargy and unconsciousness. The examination revealed lung infection (viral pneumonia) and acute respiratory failure. Physical examination on

January 8 revealed that the patient was 77mmHg with hypoxia. CT of the lungs showed patches of both lungs, a small amount of pleural effusion on both sides, and pleural adhesions. The blood test showed a progressive increase in the total number of white blood cells and a low lymphocyte count. On January 9, he was transferred to the observation ward of the fever clinic for emergency treatment and was given symptomatic and supportive treatment. On January 13, a ventilator assisted positive pressure ventilation. On January 14th, she appeared drowsy. Under ventilator-assisted ventilation, blood oxygen saturation fluctuated between 50%-85%. He was admitted to the Infectious Diseases Ward on January 15. Bp140/78mmHg before transfer at 10:30 on January 18, SPO2 85% under non-invasive ventilator-assisted ventilation. During the transfer, the patient suffered a respiratory and cardiac arrest, and the rescue was continued for 2 hours. The treatment was ineffective and clinical death was declared at 13:37 on January 18, 2020.

## Additional information about this case:

Discussion of this case:

0

Look again at chat with Barbar - he mentioned some things to pay attention to

#### https://archive.md/OSk2y

"Several Huanan market vendors said they had not done tests to establish how many of them were infected"

They never tested the market vendors! It's like they just didn't care <a href="https://archive.md/OSk2y">https://archive.md/OSk2y</a>

Here's an interesting tidbit from that May 12, 2020 WSJ article by Jeremy Page and Natasha Khan: Clifford Lane, who was on the first WHO mission to China, back in Feb 2020, just after the breakout, said the Chinese CDC told him "2020 they would eventually be able to create an epidemiological map of the market showing details such as which animals were where, and which patients visited which section of the market." Well? 2 years later and we still don't have such a map and no one has raised a stink about it.

Phylogenetic Name	Virus Name	GISAID Accession Number	Uneage	Gender) Age	Callection Date	Specimen Source	Originating Laboratory	Address	Comment
PLA Hospital - Patient 1	HCsV-15/Wuhan/WH01/2015	EP1_EL_406798	8 (0.2	M/44 Y	26-Dec-23	Bronchoalveslar Lovago	General Hospital of Central Theater Command of People's Liberation Army of China	NO. 627 Walus Road, Wuchang District, Wuhan	25,866 at genome; missing 2-25 of 5" UTR
PLA Hospital - Patient 2	hCoV-15/Wahan/WH02/2015	EFT_DL_408799	8.11 (0)	M/43 Y	31-0ec-19	Bronchisalvestar Levege	General Hospital of Central Theater Command of People's Liberation Army of China		29,398 nd genome; Long stretches of NANA (34,45% of overall sequence). Gap of 13 multichide(s) found at relpco 2017; PRAMISHET) (Sap of 13 nucleotidies when compared to the reference sequence. II.40% Unique Mutations.
PLA Hospital - Patient 3	NOW 15/WWW/WHOS/2020	671_RL_406800	8.03	1/217	01-Ase-20	Bronchoolveolar Lävage		NO. 627 Wukso Road, Wukhang District, Wukhan	25,868 of genome
PLA Hospital- Patient 4	hCoV-19/Wuhan/WH04/3020	DI_SCHOOLS	A (5)	музяч	05-tan-30	Bronchcolvestor Lavage	General Hospital of Central Theater Command of People's	NO.527 Wulso Road, Waching District, Waters	29,972 st genome
Reference Genome	Severo acute respiratory syndrome coronavirus 2 isolate Wuhan-Hu-S, correlate genome	NCBI Reference Sequence: NC_045512.2		M/41	25-Oec-19	Bronshootvestar Lavage	The Central Hospital of Wuhan	Wuhan, China	29,560 nt prome
GISAID - Patient 1	NEW-18/Waran/FREAMS- WH-01/2009	EPI_66_402123	B (E)	M/ES	24-Dec-19	Bronchostvestar Livege	Institute of Pathogen Biology, Chinese Academy of Medical Sciences & Peking Union Medical College	Beijing, China	29,899 st genome

Late december case OUTSIDE WUHAN - add replacing a removed one perhaps  $\frac{\text{https://archive.md/4BN75}}{\text{https://archive.md/4BN75}}$ 

#### brian-

Yes that seems to be what you and other informed ppl think about A/B. I'm just surprised that it's passed without comment that Koopmans doesn't agree with main point of Worobey's paper that other virologists do agree with



## https://twitter.com/franciscodeasis/status/1415825797705834496

Make sure we get this right - circular swap of the genomes of the Chens Since the starting point for this came from francisco should be good

Ne

Babar brought up contradiction of Caixin vs QQ article on 65M DRASTIC048. He's important because he's retired mahjong player with early Dec 13 onset. Caixin says he was delivery man with onset Dec 15 with other details same. QQ has much more info on him though so I suspect it's the accurate one

Yajie, director of the Department of Respiratory and Critical Care Medicine, China Resources WISCO General Hospital, Li Xin raised the CT imaging film in his hand, very surprised: "How can the lung condition be so serious." This day is December 26, 2019. After all, he was quite young, in his forties ^ check who this was - chen?

If you combine Epoch, Wang/Su - that's exactly 50 patients.



TheEngineer2 · 12:52 AM

Some points to make IMO: -we still need to validate the red stamp seals on the PDF cases. The location of stamp, signature is very specific. If validates the leak as real/fake -48 cases of early retrospective patients. All were rejected as valid cases -The hospital list shows that many more hospitals were asked to submit data. The data leak is incomplete. We only have X out X hospitals -some cases look weak. Didn't go to hospital, no fever etc. Some are red flags - died of severe pneumonia and/or lung infection.



TheEngineer2 · 1:02 AM

My favorite WHO errors are: -index case sample mix up -index case date mix up -index case not in map -first market case not in the market map If we make the bulk of the paper about low quality of data though it won't get much attention. Need to counter Worobey's argument about ascertainment bias and explain how market is likely superspread point. Mahjong stuff is gold, especially with Dec 12 49M and Dec 13 65M being linked to it. Need something about elderly age skew and how many worked there. 1000s?



Brian Reed · 1:06 AM

Countering Worobey is easy. Fine, let's just say Chen's onset is Dec16. He forgot to mention that in that case, his "exposure" was at Jiangxia hospital on Dec9-11. On the other side of the river. 30km away from market. And if you didn't believe the hospital as his location of exposure, his work is ALSO on the other side of the river.



#### TheEngineer2 · 1:08 AM

Bloom I think made good pt about a Washington State retirement home being the bulk of earliest US cases. Not the origin though obviously, just the first place mass spread happened among susceptible pop



#### Brian Reed · 1:09 AM

His central point is that he's refuted ascertainment bias. Nearly all early cases detected before case definitions came into play were in market area whether directly related or not No surprise if 1 or 2 popped up elsewhere 6 days later. That's my interpretation of him anyways



#### Brian Reed · 1:14 AM

The paper theme should be titled something appropriate, but my first reactions is: "Correcting the clusterfuck of misinformation in world leading scientific reports" -The lancet had the Dec1 onset wrong for the alzheimer guy who got sick twice. They left out the early family cluster to avoid the H2H transmission discussion -The WHO report mixed up human samples to wrong patients. The onset dates weren't investigated/corrected with public avail information. Cases are missing that should have been counted -The familiar cluster paper focussed on the clusters, but got the other early patients wrong market/non-market and lab/clinic diagnosis. Either that, or the wrong patient, or failed to include the other patients. All of the reports are garbage. We should trash them the way they deserve to be trashed.



1

#### TheEngineer2 · 1:16 AM

Would Peng Zhiyong's comments be helpful in countering Worobey? He was the head of ICU at Zhongnan Hospital of Wuhan Univ. In his Feb. 4, 2020 interview with Caixin he complained that the diagnostic criteria set by the National Health Commission would miss a lot of actual COVID patients.

His concern was regarding the narrowly strict criteria of: 1) Exposure to Huanan market, 2) fever, 3) whole genome sequencing.



#### Fansini · 1:22 AM

Is link/discussion of Peng Zhiyong in doc? Issue with Worobey is the cases actually \*detected in Dec\* did not involve official definitions. They just raised doctors suspicions, they got them sequenced, and they were SARS. This only happened near market. We need to explain that from lab leak side. It's possible same thing happened in other parts of Wuhan that never came out but we'd need more than Jennifer Zeng's anon friend to argue it

# Early spread in Children

Seen way too much about this now - surely warrants collecting references

# Caixin Liu Deyuan article mentions a lot:

https://info.51.ca/news/china/2021-02/969598.html

Archived:

https://archive.vn/ITFkY

 $\frac{https://web.archive.org/web/20211206232905/https://info.51.ca/news/china/2021-02/969598.html}{}$ 

Caixin Original: https://china.caixin.com/2020-04-07/101539697.html

Archived: https://archive.vn/ODg7U

https://web.archive.org/web/20200408141054/http://china.caixin.com/2020-04-

07/101539697.html

A report on the Yangtze River Network on December 19 also stated that the recent flu has been high, and many netizens have complained about the fact that their children's schools have been closed because of a cold and fever. The Wuhan flu index has reached the first-level standard, which is considered to be'extremely prone." Changjiang.com interviewed Yang Xiaobing, director of the Infectious Disease Prevention and Control Institute of Wuhan CDC, saying that the flu in Wuhan at that time was consistent with the national epidemic trend, mainly A Type H3N2 influenza.

The report also distributed several photos of the outpatient clinic of Wuhan <a href="Children's Hospital">Children's Hospital</a>. The hall was overcrowded. The hospital issued a notice stating that during the current influenza peak period, the waiting time for internal medicine is relatively long, and on-site registration requires waiting for 4-5 hours.

The "Wuhan Evening News" also noticed on December 20 that the temperature has continued to drop recently. The number of outpatient visits per day in the pediatric department of the two districts of <u>Wuhan Central Hospital has exceeded</u> 1,000, and the majority of children with colds and fevers.

Wuhan citizen Yang Fangzheng (pseudonym) lives in Vanke Hankou Legend Yueting, next to the western seafood market. He remembers that during the flu outbreak in Wuhan in early December 2019, his child went to middle school in Jiang'an District and had 16 fevers in his class. Class is suspended for one day.

From I think

https://info.51.ca/news/china/2021-02/969598.html

I have more

# Sequencing

Mess, mismatches

HBCDC-HB-04/2019 is unmatched. No metadata, no paper. It has 8 mutations, and none of the 21316 24325 mutations.

https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013092-01 https://nmdc.cn/resource/ncov/genome/detail/NMDC60013092-01 https://www.ncbi.nlm.nih.gov/biosample/14479130

For WH19005 in 49F it is based on the Dec23 onset and Dec29 admission date in <a href="https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013002-10">https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013002-10</a>
But the sequence doesn't quite match.
It is identical to IVDC-HB-05

### https://ngdc.cncb.ac.cn/ncov/genome/accession/?q=NMDC60013086-01

who is said to be a 32M admitted on Dec27 and shouldn't quite be in 49F These are different to IVDC-HB-GX02 32M and WIV02 32M  $\,$ 

Strange collection date "from Dec23 to Dec27" told for the BGI WH01-4 and IVDC sequences WH19001-2-4-5-8 in <a href="https://twitter.com/coroldo1/status/1368607216165523456?s=20&t=Pt-QP0Gk8hK7wcd0-P56">https://twitter.com/coroldo1/status/1368607216165523456?s=20&t=Pt-QP0Gk8hK7wcd0-P56</a> w

### **IPBCAMS** mess

Our favorite mess is the one in the WHO report about the five IPBCAMS sequences that are swapped without obvious reason

#### Table 6. Details of genomic sequencing of 13 early cases

ID	Onset	Collection date	Virus strain	Mutation position from submitted genome sequences	Mutation position identified by reanalysis	Sequencing platform	Sequencing depth	Indel rate% <sup>16</sup>
S01	2019/12/08 <b>61M</b>	2020/01/01	BetaCoV/Wuhan/IP BCAMS-WH- 05/2020	7866 <b>ok</b>	7866(iSNV) <sup>a</sup>	Illumina NextSeq 500	459	0.01
S02	2019/12/13 <b>65M</b>	2019/12/24	BetaCoV/Wuhan/IP BCAMS-WH- 01/2019	3778, 8388, 8987 <b>ok</b>	//b	Illumina NextSeq 500	2278	0.00
S03	2019/12/17	2019/12/26	WH01	6968, 11764	NA	DNBSEQ		
		2019/12/30	BetaCoV/Wuhan/W H19008/2019	24325	24325	NGS	6720	0.01
		2019/12/30	WIV02	21316, 24325	21316, 24325	Illumina MiSeq, MGISEQ 2000	35	0.01
S04	2019/12/19	2019/12/30	SARS-CoV- 2/Wuhan_IME- WH02/human/2019/ CHN	//	//	Ion Torrent X5Plus	149	0.56
		2019/12/30	BetaCoV/Wuhan/HB CDC-HB-02/2019	24325	24325	Illumina MiSeq	475	0.01

		2019/12/30	hCoV- 19/Wuhan/IVDC- HB-GX02/2019	24325	NA	Sanger dideoxy sequencing		
	52 <b>F</b>	2019/12/30	BetaCoV/Wuhan/IP BCAMS-WH- 04/2019	// ok	376(iSNV) <sup>a</sup>	Illumina NextSeq 500	2491	0.01
S05	2019/12/20	2020/01/01	BetaCoV/Wuhan/W H19004/2020	27493, 28253	//	NGS	2782	0.01
	61M	2020/01/01	BetaCoV/Wuhan/IV DC-HB-04/2020	27493, 28253	NA	missing		
S06	2019/12/20	2019/12/30	Wuhan-Hu-1	//	//	Illumina	530	0.005
S07	2019/12/20	2020/01/02	2019-nCoV WHU01	//	//	Illumina	530	0.01
		2019/12/30	WIV07	8001, 9534	9534(Coverage<10	Illumina MiSeq, MGISEQ 2000	11	0.02
S08	2019/12/20	2019/12/30	SARS-CoV- 2/Wuhan_IME- WH04/human/2019/ CHN	//	//	Ion Torrent X5Plus	45	0.51
S09	2010/12/22	2020/01/01	WH03	//	NA	DNBSEQ		
809	2019/12/22	2020/01/02	2019-nCoV WHU02	//	//	Illumina	140	0.01
	49F	2019/12/30	BetaCoV/Wuhan/HB CDC-HB-03/2019	//	//	Illumina MiSeq	3156	0.01
S10	2019/12/23 <b>49F</b>	2019/12/30	BetaCoV/Wuhan/IP BCAMS-WH- 02/2019	// ok	//	Illumina NextSeq 500	7885	0.01

		2019/12/30	BetaCoV/Wuhan/W H19001/2019	//	//	NGS	45	0.02
		2019/12/30	WIV04	//	//	Illumina MiSeq, Illumina HiSeq 1000	108	0.01
		2019/12/30	BetaCoV/Wuhan/IV DC-HB-01/2019	//	NA	missing		
	41M	2019/12/30	BetaCoV/Wuhan/IP BCAMS-WH- 03/2019	<sup>6996</sup> ok	//	Illumina	3371	0.01
S11	2019/12/23	2019/12/30	WIV05	7016, 21137	//	MGISEQ 2000	13	0.01
S11	52 <b>F</b>	2019/12/30	SARS-CoV- 2/Wuhan_IME- WH05/human/2019/ CHN	//	"	Ion Torrent X5Plus	37	0.50
		2019/12/30	WIV06	//	//	Illumina MiSeq, MGISEQ 2000	19	0.01
S12	2019/12/23	2019/12/30	SARS-CoV- 2/Wuhan_IME- WH03/human/2019/ CHN	24325	24325	Ion Torrent X5Plus	1407	0.55
S13	2019/12/26	2019/12/30	SARS-CoV- 2/Wuhan_IME- WH01/human/2019/ CHN	4946, 8782, 28144	4946, 8782, 28144	ThermoFisher S5Plus	176	0.53

a Intra-host single nucleotide variant.
b// indicates no mutation.

Virginie sent an email to BIGD who replied:

Dear X.

We have NGS data only for the following three viruses in your list:

BetaCoV/Wuhan/IPBCAMS-WH-02/2019 (SAMC134549: CRX101787, CRX101779)

BetaCoV/Wuhan/IPBCAMS-WH-03/2019 (SAMC134550: CRX101786, CRX101778)

BetaCoV/Wuhan/IPBCAMS-WH-04/2019 (SAMC134556: CRX101780, CRX101772)

They can be accessed at https://bigd.big.ac.cn/gsa/browse/detail/CRA002475.html As you have observed, we are having a major maintenance currently and the data will not be available until later this month. Sorry for the inconveniences. Best regards,

#### Article on IPBCAMS sequences

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7147275/

Article on WH1900x sequences (not the same runs as in the BGI IVDC paper?)

https://academic.oup.com/cid/article/71/15/713/5780800

Take a look at the supplementary table 1

	ID	Gender	Age	Clinical lab	Days after onset	ICU	Outcome
WH19001	nCov1	female	49	Negative	8	N	Recovered
WH19002	nCov2	female	52	Negative	8	Y	Recovered
WH19003	nCov3	male	40	Negative	15	Y	Recovered
WH19004	nCov4	male	61	Negative	12	Y	Deceased
WH19010	nCov5	male	40	Negative	8	N	Recovered
WH19012	nCov6	male	56	Negative	10	Y	Recovered
WH19016	nCov7	female	53	Negative	7	N	Recovered
WH19053	nCov8	male	41	Negative	4	N	Recovered

Among the 8 patients with COVID-19, patients nCoV4 (61M) and nCoV7 (53F) were from the same household, with dates of symptom onset differing by 5 days; thus, transmission from patient nCoV4 to patient nCoV7 is highly suspected, especially considering that only patient nCoV4 had been to the Huanan seafood market in Wuhan, the starting point of the outbreak and the suspected source.

The raw reads corresponding to the BGI-IVDC paper

https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC7159086/

Have been recently published, which include WH19001-2-4-5-8, they are probably the same patients as in the previous paper but likely different sequencing runs.

https://github.com/niemasd/PRJCA008874-Analysis

Caixin report, a must read

https://web.archive.org/web/20200227094018/http://china.caixin.com/2020-02-26/101520972.html

Many patients were sequenced multiple times, essentials sources for the deduplication: The (gisaid, genbank, ngdc) metadata, the phylogenetic trees like <a href="https://nextstrain.org/community/babarlelephant/cov/early/china">https://nextstrain.org/community/babarlelephant/cov/early/china</a> and the renanalysis p.72 of the WHO report.

## List of papers

https://www.thelancet.com/article/S0140-6736(20)30251-8/fulltext#seccestitle80

IVDC: WH19001-WH19008 BGI: Wuhan/WH01-WH04

https://www.nejm.org/doi/full/10.1056/NEJMoa2001017

https://weekly.chinacdc.cn/en/article/id/a3907201-f64f-4154-a19e-4253b453d10c

IVDC: IVDC-HB-01 04 05

https://www.nature.com/articles/s41586-020-2012-7

WIV: RaTG13, WIV02 to WIV10

https://www.nature.com/articles/s41586-020-2008-3

Shanghai: Wuhan-Hu-1

https://www.tandfonline.com/doi/full/10.1080/22221751.2020.1725399

Wuhan university, Zhongnan hospital: WHU01 and WHU02

https://covid-19.conacyt.mx/jspui/bitstream/1000/674/1/101211.pdf

On the raw reads WH1900x

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7147275/

IPBCAMS: IPBCAMS-WH-01 to 05

https://mega.nz/file/H6QGkZ7L#368vNf7sjbbjlB-xTSz2lYqUmJyUjV2p3wTRc3g-SrE

Beijing-01

https://news.sina.com.cn/o/2020-01-22/doc-iihnzahk5751758.shtml

A new patient onset Dec 21, 39F, who had "NGS detection of pathogenic microorganisms" on Dec 26, transferred to Jinyintan on Dec 31.

Unpublished sequence?

## First sequencing, Little dog's post

On the 1st sequencing of 65M1 by Weiyuan Gene (Vision medicals), Translated by Gilles Demaneuf

https://docs.google.com/document/d/1\_VHTcHlo2lxVP6BSVObaKRM\_GVl34bLHfJa39PY6E3M/edit?usp=sharing

See also 65M1, Caixin report, the Jinyintan story, the IPBCAMS paper.

## Environmental sequences

env/Wuhan/IVDC-HBF54/2020|EPI\_ISL\_408512|2020-01-01 is likely the sequence from Mrs Wei's stall (F54 in the Epoch times article). Need to check all the environmental sequences on gisaid.

Other published environmental sequences are EPI\_ISL\_408515 EPI\_ISL\_408514 EPI\_ISL\_408513 EPI\_ISL\_408511 stall B5 (West 5th street 6,8 Fisheries) and F13 (West 11th street 15 Chan Long special vegetable wholesaler). The F13 sample was also isolated and passaged obtaining high quality sequences (identical to Wuhan/Hu-1). See <a href="https://www.epochtimes.com/gb/20/5/31/n12150755.htm">https://www.epochtimes.com/gb/20/5/31/n12150755.htm</a> for the stalls layout and <a href="http://babarlelephant.free-hoster.net/visiting-the-wuhan-seafood-market/epochtimes-CDC-details-environmental-samples.jpg">https://babarlelephant.free-hoster.net/visiting-the-wuhan-seafood-market/epochtimes-CDC-details-environmental-samples.jpg</a> for the translation of the epochtimes CDC document it refers to.

All of them were collected on 2020-01-01 by the China CDC (IVDC). The epochtimes document indicates that there are several other unpublished sequences, probably of low quality, but still.

A20, the only lineage A sequence found in the market. The stall is 7th street 15,17 and had 3 positive environmental sequences. A20 found on a glove was cultured, fully sequenced and published lately in <a href="https://assets.researchsquare.com/files/rs-1370392/v1">https://assets.researchsquare.com/files/rs-1370392/v1</a> covered.pdf?c=1645813311

An early partial sequence was mentioned in epochtimes and visible on twitter <a href="https://twitter.com/coroldo1/status/1414272431737344006?s=20&t=zx2uRlfavsFYUKGk\_W">https://twitter.com/coroldo1/status/1414272431737344006?s=20&t=zx2uRlfavsFYUKGk\_W</a> SMoA

## The Red Dawn list

39 names, extension of the NHC list of 17.

https://pastebin.com/kSXDaQU7

Would be good to have this in Chinese but the ones towards the end that we only have English translation for are all Jan onset so less interesting.

A few links to probable sources of the Red Dawn list

https://web.archive.org/web/20200111031745/http://wjw.wuhan.gov.cn/front/web/showDetail/2020011109036 first death (61M)

Second death 69M2 on Jan 15

https://www.nmpa.gov.cn/directory/web/nmpa/zhuanti/ygyjzxd/yqtb/20200116120001393.html

http://www.nhc.gov.cn/yjb/s3578/202001/5d19a4f6d3154b9fae328918ed2e3c8a.shtml deaths <= January 22

https://mp.weixin.qq.com/s/dgkQzx5KxUDP1YTWjUpCEA

https://mp.weixin.qq.com/s? biz=MTg0MzMwODA0MQ==&mid=2653371908&idx=4&sn=bd55cbe50517c6586751f223c69d1b79&chksm=5e32cf6269454674a1d5e7ee064e616cb72b088a09f43f2f869d19dac80d514d910b07fdffde&scene=21#wechat redirect

https://mp.weixin.qq.com/s? biz=MTg0MzMwODA0MQ==&mid=2653371806&idx=1&sn=d7e570a8829811a34398390a677f1ff2&chksm=5e32ccf8694545ee86835bf68a71835887afec101113901c6917cbc0040310969ac0f97ef2b5&scene=21#wechat redirect

https://web.archive.org/web/20200121101138/http://wjw.wuhan.gov.cn/front/web/showDetail/2020012109085

http://wjw.hubei.gov.cn/bmdt/dtyw/202001/t20200124 2014626.shtml

http://wjw.hubei.gov.cn/bmdt/ztzl/fkxxgzbdgrfyyq/xxfb/202001/t20200125 2014855.shtml

http://wjw.hubei.gov.cn/bmdt/ztzl/fkxxgzbdgrfyyq/xxfb/202001/t20200122\_2014327.shtml

http://wjw.hubei.gov.cn/bmdt/ztzl/fkxxgzbdgrfyyq/xxfb/202001/t20200123 2014520.shtml

https://github.com/chenxsan/deathline/blob/master/data.json aggregated 42 deaths

https://archive.ph/Bkcvo aggregated 60 deaths

Doctors deaths all over China in late January and February, some from Wuhan <a href="https://www.sohu.com/a/385329250">https://www.sohu.com/a/385329250</a> 120168901

Some suspected deaths around Jan 20 https://www.sohu.com/a/368767944 116237

## Onset curves, evolution of the number of cases

Sorting this out in <a href="https://justpaste.it/6av8r">https://justpaste.it/6av8r</a>

Most data parsed for a visualization at <a href="https://flodebarre.github.io/covid\_firstCases/">https://flodebarre.github.io/covid\_firstCases/</a>

# Market maps

## Babar's map

http://babarlelephant.free-hoster.net/visiting-the-wuhan-seafood-market/Mostly archived on https://babarlelephant.github.io/

## Brian's map

https://docs.google.com/spreadsheets/d/1cTtHsk61au5d-Cu2P7zrBZtxgcj3\_jnqHnCQwHpj-3Y/edit#gid=0

## Koopmans' updated maps

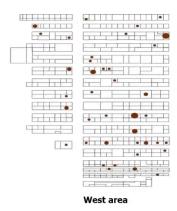
From her BMJ talk <a href="https://youtu.be/eLSv4lwk\_jM?t=1907">https://youtu.be/eLSv4lwk\_jM?t=1907</a>

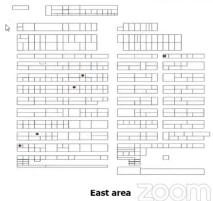
It includes 58 cases, more cases than the WHO maps, for example it includes Mrs Wei. 49M 50M 48F 78M's stall is N=4 whereas 78M (the father in law) wasn't working in the market.

"Koopmans didn't realize that her map was different! When we told her about it, she said it was an earlier version she was passed from the Chinese epi team. She didn't realize it was different at all."

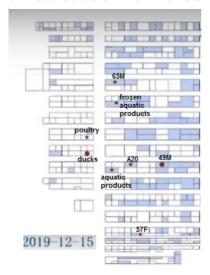
### Cases with fixed stalls in the market







A map showing 8 early cases, including 65M, 49M, A20, Wei, and 4 unmatched dots. And which stall sells what



Guess for the unmatched dots:

The top (frozen) aquatic products street 10

https://aiqicha.baidu.com/company\_detail\_15824189595228

may be 44M1 which fits well with his stall description

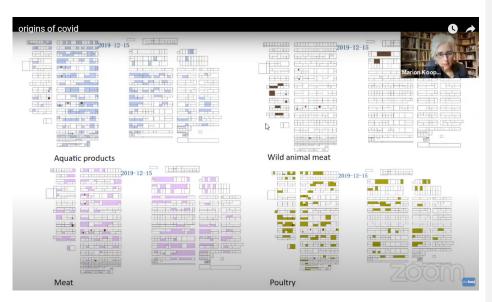
("My younger brother works part-time at a stall in Wuhan Huanan Seafood Wholesale Market that sells frozen products such as chicken, duck and fish". Though a bit in contradiction with "Wang Wei, 44 years old this year, works part-time at a stall in Wuhan Huanan Seafood Wholesale Market that sells frozen seafood such as octopus, yellow croaker and squid.")

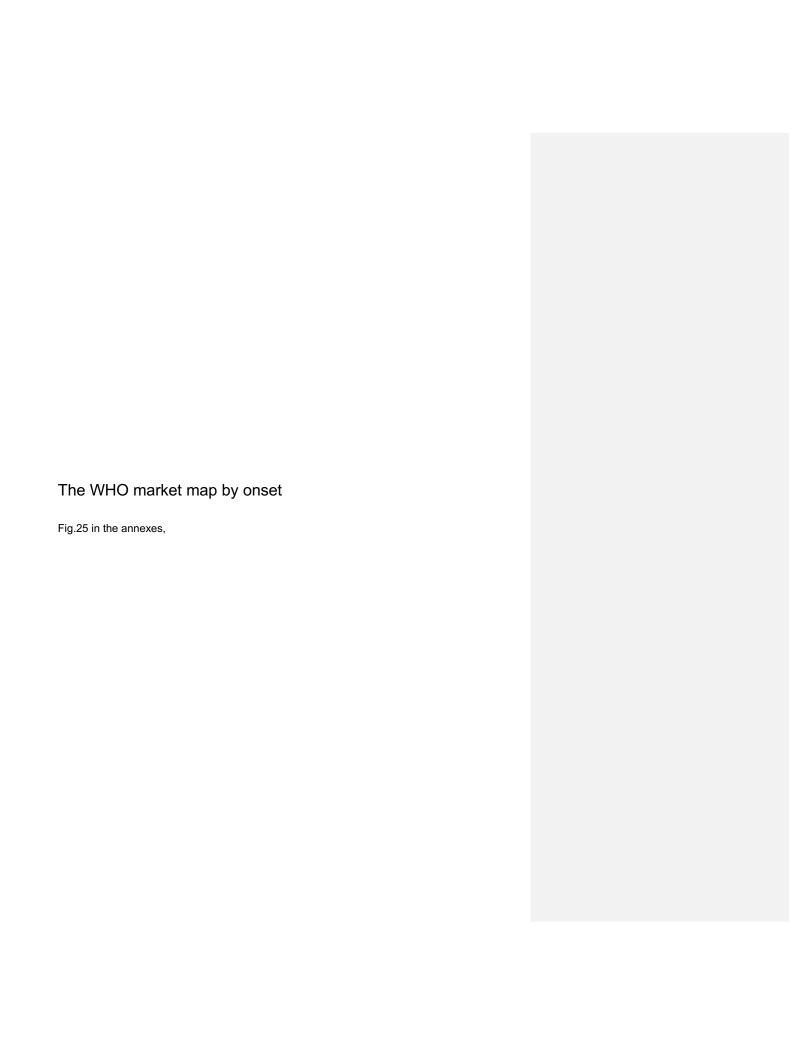
So the bottom one may be 43 (thepaper's overlay says aquatic products) though the owner's name is Wang, so is 44M1's name.

The ducks stall may be the one mentioned as playing with 49M in <a href="https://archive.ph/NhRD4">https://archive.ph/NhRD4</a> (we see the ducks there

http://cov2.free.fr/video%20facebook%20couloir%20sombre%206%20ouest%2010000000 549 297742876302 6005460415033573593 n.mp4#t=71.)

47M could be in one of the two poultry stalls (thepaper's overlay).





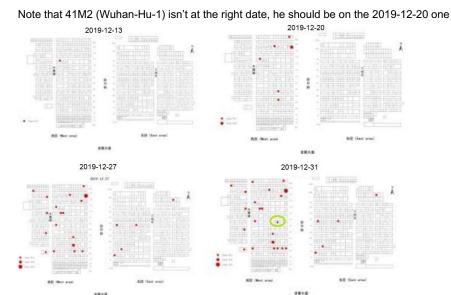


Fig. 25. Spatial distribution of vendor cases associated with the Huanan market by week of onset.

# First Level Reponse April 2021 Movie

Episode 1, https://www.youtube.com/watch?v=mCT2fp7QLIE

Episode 2 https://www.youtube.com/watch?v=qOAegtF0eMg

Episode 3 https://www.youtube.com/watch?v=XV0ajeKck-U

Episode 4 https://www.youtube.com/watch?v=ByCyGzw9J4c

Episode 5 https://www.youtube.com/watch?v=AkY71JsrGe4

Attempted subtitles there (videosubfinder, OCR, google lens) for the Episode 1 showing some early patients, Zhang Jixian, Huang Chaolin; Zhong Nanshan, Zhengli Shi and so on <a href="http://cov2.free.fr/Covid-FirstLevelResponse/">http://cov2.free.fr/Covid-FirstLevelResponse/</a>

A shorter video showing the early patients is available at <a href="https://www.163.com/v/video/VKVLQPJL5.html">https://www.163.com/v/video/VKVLQPJL5.html</a>

Video archived at

https://web.archive.org/web/20220501230434/https://flv.bn.netease.com/b84e392b23a289dadac0c3802844e7e41755ed36edcadbc9e225a9c3a847898192a3c860cdd77b3400e26c07ca71e44df1fab2a6c63a7528b854c5e2e0c6f0776bdbfc404c8423bbb883589954ae1615fecbe2f1924e3376b7715b6c71dc8390434fd64a7e824dc5c25b40b613ba422228fa6f4b77ae93e4.mp4

## Doctors 2020 series

The "Doctors 2020" Chinese documentary series, something like 22 episodes <a href="https://v.qq.com/x/search/?q=%E5%8C%BB%E8%80%852020&stag=0&smartbox">https://v.qq.com/x/search/?q=%E5%8C%BB%E8%80%852020&stag=0&smartbox</a> ab= This is the list of protagonists <a href="https://m.yunnan.cn/system/2020/05/14/030673610.shtml">https://m.yunnan.cn/system/2020/05/14/030673610.shtml</a> Episode 1 includes Zhang Jixian, Zhang Dingyu, and so on.

## Frontline China's covid secrets

Shows the market (including some hard to find video by Hong-Kong tv now.com and the little known long July 2019 video ), tells the vision medicals and wechat leak sequencing story, Discusses the lie/miss on h-to-h transmission (apparently the lie was repeated many times, without any precaution, by Fu Gao, to the WHO, and so on)

, shows a 76M patient and his son going from Shenzhen to Wuhan, then tells the

## 61F Thailand/NIH-15/2020 story

The first case abroad, who apparently arrived from Wuhan on Jan 8, not Jan 5 as in the <u>Gisaid collection date</u>. Supaporn is interviewed, she says that she quickly obtained 4 short partial SARS-like sequences, but had to wait for the full sequence to be released by China (ie. until Jan 11).

Then the Zhang/Holmes/Rambaut Jan 11 story (releasing Wuhan-Hu-1 on virological.org and twitter).

Then cites the Central internal document complaining about the high number of suspected impossible to confirm virologically (while there were still 41 officially confirmed cases). According to the movie on Jan 14 the understanding of h-to-h by health officials was clear, but they didn't want to freak the public out. In the official reports it became "h-to-h is limited but cannot be ruled out".

It shows the <u>Jan 19 Wuhan CDC meeting</u> where the director said there was limited transmission and the "epidemic is preventable and controllable". In the same meeting Huang Chaolin (Jinyintan) talked and <u>will become PCR positive on Jan 22</u> (then hospitalized with severe pneumonia, onset Jan 17).

Transcript at <a href="https://www.pbs.org/wgbh/frontline/film/chinas-covid-secrets/transcript/">https://www.pbs.org/wgbh/frontline/film/chinas-covid-secrets/transcript/</a>

# Strong knowledge of h-to-h transmission on Jan 1

It is unclear why the officials have been so cautious with h-to-h transmission which was obvious since the beginning.

The first official mention of a cluster? The Wuhan health commission on Jan 15 <a href="http://web.archive.org/web/20200115162811/http://www.caixin.com/2020-01-15/101504221.html">http://web.archive.org/web/20200115162811/http://www.caixin.com/2020-01-15/101504221.html</a> possibly referring to 61M 53F

AP April 2020 article on the 3 weeks during which h-to-h transmisison and exponential growth weren't acknowledged <a href="https://apnews.com/article/virus-outbreak-health-ap-top-news-international-news-china-clamps-down-">https://apnews.com/article/virus-outbreak-health-ap-top-news-international-news-china-clamps-down-</a>

68a9e1b91de4ffc166acd6012d82c2f9?itid=lk inline enhanced-template

It was a big mistake to deny h-to-h transmission in the 31th December announcement of 27 cases <a href="https://wjw.hubei.gov.cn/bmdt/dtyw/201912/t20191231">https://wjw.hubei.gov.cn/bmdt/dtyw/201912/t20191231</a> 1822343.shtml

"So far, the investigation has not found obvious human-to-human transmission, and no medical staff infection has been found."

This sloppy claim has been repeated several times, until Jan 20 where Zhong Nashan officially asserted that it was spreading through h-to-h transmission. .

There are the cases known so far as showing h-to-h to anybody looking at the data on Jan 1:

Cluster mentioned in the Wuhan & Hubei CDC Dec 30 document:

49M 48F 50M work together but 78M doesn't

70F brings food to her son 42M, both were admitted in Houhu on Dec 28 Non-market patients:

41M1 accountant from Jiangxia district, purpose of the Wechat SARS report 62M 62F 35M not related to the market, Zhang Jixian's family cluster Health workers:

65M2, clinic doctor near the market, Red Cross then transferred to Central on Jan 1

51M Beijing-01, pharmacist near the market, admitted on Dec 27 in Beijing and diagnosed on Jan 4

72M Liu Deyuan, clinic 200m West of the market

31F2 Wu Jing is a medical staff in a tertiary hospital in Qingshan District, no link to the market, admitted in Puren on Dec 31

Poorly documented clusters:

overlay

31M and 51M sell turtles together, admitted in Houhu

51M and 49F sell seasonings together

Li cluster 4

52F and 51M3 work together, 25F doesn't
Li and WHO cluster 2
40M 32M together in Jinyintan and the WIV paper (and 57U)
Li and WHO cluster 3
61M purchaser who infected his wife 53F (though sometimes 57F2)

The early cases are randomly distributed in the market Some play Mahjong together

Review of decision-making in the early stage of the epidemic: three key "fighters" that are fleeting

#### https://www.yicai.com/news/100518039.html

On January 8, the second group of national experts on novel coronavirus infection pneumonia arrived in Wuhan, including Wang Guangfa, director of the Department of Respiratory and Critical Care Medicine at Peking University First Hospital, who was later diagnosed. In an interview with the media, Wang Guangfa said that the information he had during his stay in Wuhan was limited, and no clear evidence of human-to-human transmission was found. Wang Guangfa also said that human-to-human transmission was suspected, and those clustered cases were seen, but the clustered cases may be human-to-human transmission or may be caused by cluster exposure, "According to the information we had at the time, there was no clear evidence that someone Human-to-human transmission. Especially the infection of medical staff."

http://web.archive.org/web/20200122074033/http://www.caixin.com/2020-01-22/101507157.html Interesting case, Lu Jun a 30 year old Tongji hospital emergency word doctor (working at the fever clinic during the outbreak) was hospitalized on January 10 then sent to Jinyintan. Onset January 5. This case certainly had a role in the acknowledgment of h-to-h transmission on Jan 20.

"Caixin reporters noticed that in 11 notifications from January 12, 2020 to January 21, 2020, the statement on whether medical staff was infected no longer appeared. Until 1:45 a.m. on January 21, the Wuhan Municipal Health and Health Commission announced through its official Weibo that a total of 15 medical staff in the city were diagnosed with pneumonia cases of new coronavirus infection, and another was a suspected case. Among the 16 patients, one was critically ill. This is the first time that Wuhan officials have admitted a confirmed case of medical staff since the establishment of the pneumonia epidemic situation report on December 31, 2019." (this is the topic of a Jan 21 Caixin article

 $\frac{\text{http://web.archive.org/web/20200122112934/http://opinion.caixin.com/2020-01-21/101506670.html})}{21/101506670.html})$ 

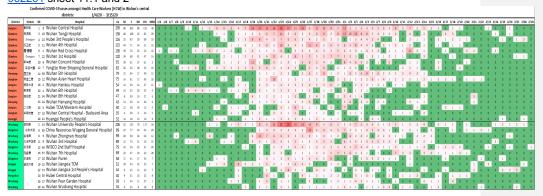
See also the early work (Apirl 2020) of Mai He from St Louis hospital https://arxiv.org/ftp/arxiv/papers/2007/2007.07202.pdf

#### Interview

 $\underline{\text{https://www.voachinese.com/a/voaweishi-20200715-there-is-evidence-that-china-hide-of-infoled-to-the-disaster/5507343.html}$ 

## **HCW** cases

Charles Rixey has a lot of data on health cases in January, but none has onset in December. <a href="https://docs.google.com/spreadsheets/d/1ouktt7ftoyEtwcXrbnU24YH4bFbS2FmU/edit#gid=275952261">https://docs.google.com/spreadsheets/d/1ouktt7ftoyEtwcXrbnU24YH4bFbS2FmU/edit#gid=275952261</a> sheet 11.1 and 2



Gilles brought an interesting table that leaked on wechat on February 5 showing a Wuhan CDC meeting about 501 HCW cases, certainly as of early February (most with onset before Jan 25 or so). For each hospital with >= 15 HCW confirmed cases it also indicates the number of suspected cases and the onset of the earliest case.

https://archive.ph/NLcQ1

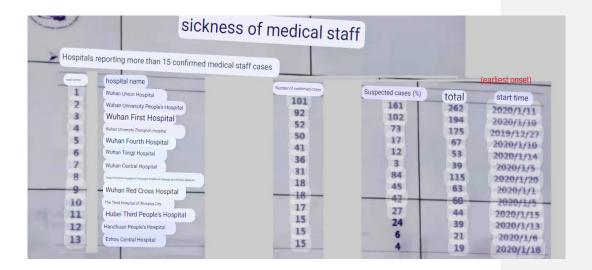
https://www.ntdtv.com/gb/2020/02/05/a102770283.html

The onset date in Wuhan No.1 hospital on Dec 27 suggests 31F2 but there is a mismatch as she is said to work in Qingshan district (Puren and Iron&Steel). The HCW with onset Jan 5 in Tongji is certainly Lu Jun the 30U of

http://web.archive.org/web/20200122074033/http://www.caixin.com/2020-01-22/101507157.html It is unclear what the Jan 20 date for Central refers to as Li Wenliang had onset on Jan 10 and was hospitalized on Jan 12, and Ai Fen mentions a nurse "found" on Jan 10. For Tongji there is an article <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243089/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7243089/</a> giving Jan 7 as the earliest onset date, and 59 HCW cases with onset <= Jan 23.

For Union, the Jan 11 date may refer to the neurosurgery patient with a tumor who infected 13 nurses and one doctor. <a href="https://new.qq.com/omn/20200125/20200125A07TT200.html">https://new.qq.com/omn/20200125/20200125A07TT200.html</a> <a href="https://www.xinhuanet.com/politics/2020-01/27/c">https://www.xinhuanet.com/politics/2020-01/27/c</a> 1125504403.htm

One of the nurses s interviewed in <a href="https://www.sohu.com/a/377088123">https://www.sohu.com/a/377088123</a> 391294 and several other articles, onset on Jan 16.



## Zhong Nanshan on cctv

Announcement of confirmed h-to-h transmission on Jan 20 http://m.news.cctv.com/2020/01/20/ARTIpzG9gFnLXsE7amZvU9MY200120.shtml http://baijiahao.baidu.com/s?id=1656261351899529180

## Lobsters!

### https://twitter.com/Byron\_Wan/status/1440185374714654724

A study claiming the virus entered Huanan market via frozen lobster from the US has maps showing the surnames and location of 21 cases in three small areas of the western section. It's difficult to reconcile the layout from the "Lobster Map" with that of the WHO report. Location M where two

<sup>&</sup>quot;According to the current information, the new coronavirus pneumonia is definitely human -to-human transmission."

<sup>&</sup>quot;There are 2 cases in Guangdong, who have never been in Wuhan" That day there were 217 confirmed cases.

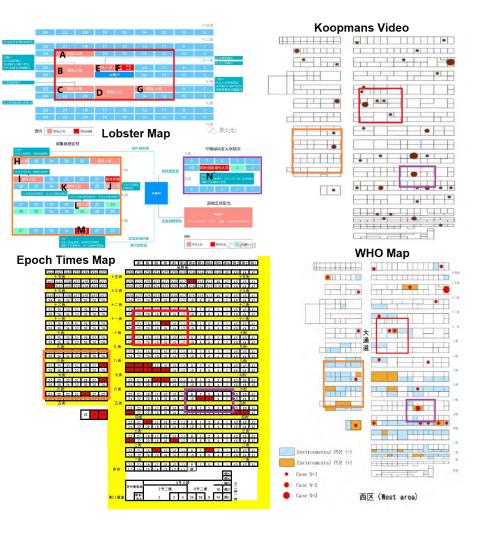
employees named 金 "have positive antibodies" is site of +environmental samples Q61 and Q62, Q68-70. Lobster study claims 7 environmental samples and 18 animal samples were positive.

\*\*\*明 Ming from #11-13 Tenth Street lines up with one of Koopmans map cases and is a very rare surname

https://archive.md/7HLXT

## Merchant A is Zheng certainly 69M1

Surname		Role	Loc	Surname		Role	Loc	Surname		Role	Loc
张	zhāng	shopkeeper	Α	郇	céng	employee	Н	渔	xiào	employee	L
蔡	cài	owner	В	宋	sòng	employee	н	朱	zhū	employee	٦
胡	hú	owner	С	肖	xiào	employee	I	金	jīn	employee	М
吴	wú	shopkeeper	D	魏	wèi	employee	I	金	jīn	employee	М
胡	hú	owner	Е	陈	chén	employee	J	文	wén	employee	N
王	wáng	shopkeeper	F	陈	chén	owner	K	H	wáng	employee	N
明	míng	employee	G	杨	yáng	employee	κ	彭	péng	employee	N



# Shortage of PCR tests in January

Most hospitals were in the dark at least until Jan 23.

Zhongnan bought some SARS primers on Dec 31 and got some positives in early January Jinyintan tested their suspected cases and got 41 confirmed on Jan 10 (see the long Caixin article on Zhongnan)

The WIV tested the 7 Jinyintan samples on Dec 30 evening and got (all?) positives (see Zhang Dingyu's story).

https://twitter.com/coroldo1/status/1388383925702037504?s=20&t=7qkooawyVJk6 PtaZ2k vaw Short document on PCR test validation, coroldo says on Jan 10

See also this article <a href="https://mp.weixin.qq.com/s/XnDmzAbvmtZgp7Px2mFVFA">https://mp.weixin.qq.com/s/XnDmzAbvmtZgp7Px2mFVFA</a>

## More to sort out

The "Doctors 2020" Chinese documentary series, something like 22 episodes <a href="https://v.qq.com/x/search/?q=%E5%8C%BB%E8%80%852020&stag=0&smartbox\_ab="https://w.qu.com/x/search/?q=%E5%8C%BB%E8%80%852020&stag=0&smartbox\_ab="https://w.yunnan.cn/system/2020/05/14/030673610.shtml">https://w.yunnan.cn/system/2020/05/14/030673610.shtml</a>

Episode 1 includes Zhang Jixian, Zhang Dingyu, and so on.

a doctor from St Liouis Missouri who speaks Chinese, Mai He, he wrote a preprint in April 2020 on early cases. A lot of data has been proven wrong/incomplete since then, but at the time it was good work. <a href="https://arxiv.org/ftp/arxiv/papers/2007/2007.07202.pdf">https://arxiv.org/ftp/arxiv/papers/2007/2007.07202.pdf</a> Interviewed there <a href="https://voachinese.com/a/voaweishi-20200715-there-is-evidence-that-china-hide-of-info-led-to-the-disaster/5507343.html">https://voachinese.com/a/voaweishi-20200715-there-is-evidence-that-china-hide-of-info-led-to-the-disaster/5507343.html</a>

## https://finance.sina.com.cn/meeting/2020-11-25/doc-iiznctke3179937.shtml

Long speech of Wu Zunyou, chief epidemiologist of the Chinese Center for Disease Control and Prevention 25 November 2020, about the first knowledge and actions of China CDC. "On December 31, there were only 41 cases in Wuhan, and among the 41 cases, only 27 had a history of exposure to South China seafood," Wu Zunyou said Followed by his version of the timeline.

From Michael Standeart:

That's the Hubei farm <a href="https://archive.ph/0JGJE#selection-383.0-392.0">https://archive.ph/0JGJE#selection-383.0-392.0</a> owned by a game stall 10th street 29,31

https://aigicha.baidu.com/company\_detail\_15812603086221

tianyancha.com/company/233617.... Xianglong Poultry Business Department, Jianghan District, Wuhan City; No. 29 and 31, 10th Street, West District, South China Seafood Market, Jianghan District, Wuhan; No phone. Legal rep Zhang Niandong That's the one that had its own two farms north of Wuhan. One which had licenses for raccoon dogs, civet, porcupine, etc. The other didn't have info on licenses. Xiaogan Shuangdong Special Breeding Co., Ltd in Xiaogan, Hubei tianyancha.com/company/316053... that directly says it was engaged in artificial breeding of terrestrial wildlife but does not say what animals And this: Xiaogan Shuangdong Special Breeding Co., Ltd. Anlu Branch, Anlu Hubei: tianyancha.com/company/335084... which directly says they were licensed for porcupine, wild boar, hedgehog, South China rabbits, 'dog fox' which is another name for raccoon dogs, and "white faced fox?" which is another name for civet.

A good timeline script, easy to modify:

https://m.mp.oeeee.com/h5/pages/v20/nCovTimeline/index.html

The SARSCoV2 Timeline github project, forked many times:

https://covid19.forget.eu.org/

Coming with its deleted repository but still archived:

https://web.archive.org/web/20200327150609/https://github.com/Pratitya/wuhan2020-

timeline/issues/13

Coroldo's timeline:

https://docs.google.com/document/d/1AcZAF014BoAaTa3k6\_Oav0kGvg8Kb0plpqsX\_4Zgzuc/edit?usp=sharing

A not bad timeline on last days of December

https://zhuanlan.zhihu.com/p/148499268

Wuhanmemo.com's timeline (not alive anymore)

http://web.archive.org/web/20210228062812/http://wuhanmemo.com/

Who is this:

#### https://archive.ph/MpUlr

DRASTIC087 entry created, I leave the who is this entry as well, because we don't have his age, he may be mentioned somewhere else

Li Xin, director of the Department of Respiratory and Critical Care Medicine of China Resources Wuhan Iron and Steel General Hospital, raised the CT imaging film in his hand and was very surprised: "Why is the lung condition so serious." This day is December 26, 2019.

: It was really unexpected at that time. I remember that on December 26, 2019, a patient was admitted. My doctor showed me a CT imaging film, and the lungs did look heavy. The patient had been treated for several days because of fever, and his body temperature had not dropped significantly. We were also quite puzzled. After all, he was still quite young, only in his forties, so his recovery would not be so slow. About a few days later, we received a call from the Health and Health Commission. At that time, it did not directly say that it was related to the Huanan Seafood Market, but only said that there was such a type of viral pneumonia that was related to the Huanan Seafood Market. Tell us like this, for unknown reasons. We asked about the patient's activity trajectory, and it turned out that he really had contact with the Huanan Seafood Market. His family opened a restaurant, and he went to the seafood market to buy goods. This is the first case we have contact with.

I don't remember the specific time point. This patient was admitted to the hospital on December 26. After staying here for a week, he was transferred to a designated hospital. More and more patients related to the Huanan Seafood Market began to spread in the society, saying that SARS may have reappeared, and his family was also very nervous and had to be transferred to a designated hospital, so we helped to contact Wuhan Jinyintan Hospital and transferred to the hospital.

#### https://mp.weixin.qq.com/s/XnDmzAbvmtZgp7Px2mFVFA

Some patients are not even tested until they die. Publicly reported cases include Wen Zengxian, former deputy director and inspector of the Hubei Provincial Civil Affairs Department, Xu Dapeng, director of the environmental protection organization Friends of Nature, and his wife, who died on January 21 and 12, respectively. Before their deaths, they were suspected of being infected. Severe pneumonia, but not tested for novel coronavirus pneumonia.

# https://mp.weixin.qq.com/s/xuf8nn1OPOY51cyZMduQ-Q

https://news.ifeng.com/c/7tRkywkpccv

Seems to be a 56M Huanan worker (neighbor of Mrs Wei) onset in early January, hospitalized for a weeks in Red Cross

It was an accident for us to meet Huang Chang, a vendor at the Huanan Seafood Market. The market has already been closed on January 1, 2020. It has been three weeks since the market closed yesterday. We held little hope in the evening and wanted to go to the Huanan Seafood Market to learn more about the situation. Huang Changzheng came out of his closed stall. There was a lot of goods in the store. He was worried, so he came to have a look. The 56-year-old wears a disposable mask. He looks very old and his mental state is not good. He calmly told us that he was a patient with new pneumonia in Wuhan, as was his wife Li Guifang, and then invited us to his house to chat.

The community where Huang Chang and his wife lived was at the back of the East District of Huanan Seafood Market, almost separated by a wall, and it took only four or five minutes to walk home. This is an old community, and the narrow roads of the community are full of various

goods. He told us that there are many tenants who do business in the Huanan Seafood Market upstairs and downstairs. Everyone is usually busy with business. Although they are familiar with each other, they have no personal contacts and he cannot name them. As far as he knows, there are several people suspected of being infected in that building alone. Shouldn't the patient be isolated in the hospital? Why are Huang Chang and his wife still at home, and their movements are not restricted? Huang Chang told us that he had just been discharged from Wuhan No. 11 Hospital (that is, Wuhan Red Cross Hospital, a secondary hospital) on January 20, and the admission diagnosis written on the discharge record was: severe pneumonia (unknown cause), and was discharged with a diagnosis of viral pneumonia.

A few days after Huang Chang was sent to the Wuhan Red Cross Hospital, his lover Li Guifang also developed similar symptoms: fatigue, fever, a slight cough, and no appetite. She has always been in good health, but in those two days she found that she couldn't even climb the stairs to go home. On January 11, she also went to Wuhan Red Cross Hospital. She told us that after the examination, the doctor told her that she had been infected, but the condition was mild and did not need to be quarantined. When I saw her on the afternoon of the 21st, Li Guifang had just returned from the hospital after an injection. She said that she would continue to go to the hospital in the next few days.

Huang Chang said that after the owner who sold fish and shrimp was hospitalized, the next problem was a couple selling dried fruit at the opposite stall. The condition is similar to the former, and the whole body is weak. Huang Chang watched the other party go for injections every day, and came back holding a big tank to drink water for several days, but it didn't get better. It wasn't until one day that the other party's son was selling goods that he knew that the person had been sent to Wuhan Union Medical College Hospital. Only later did I know that the other party had a serious lung infection, and the high fever once reached 41 degrees. After New Year's Day, Huang Chang began to feel unwell and tired, and it became more and more difficult to climb from the downstairs to the fourth floor where they lived. Later, he began to have a fever and cough. After three days of hanging water in the community outpatient clinic, he remembered that he had medicines commonly used for colds, such as cephalosporins, but the symptoms did not improve, but continued to worsen. On the afternoon of January 6, Huang Changcai was sent to Wuhan Red Cross Hospital by his family.

### https://baijiahao.baidu.com/s?id=1656303704660421965&wfr=spider&for=pc

Beijing News Express (Reporter Xu Wen and Wu Jiaoying) According to the Wuhan Health and Health Commission, as of 24:00 on January 19, Wuhan has reported a total of 4 deaths from pneumonia caused by new coronavirus infection. Xia Mei (pseudonym), the owner of the seafood business in the Huanan Seafood Wholesale Market, told reporters that one of the deceased was about 70 years old and was a helper at the market.

Xia Mei has been operating the seafood business in the Huanan Seafood Wholesale Market for seven or eight years. In her memory, the "Old Ghost" was around 70 years old and worked in the market for more than two years. He was responsible for handling goods in many shops in the east and west areas of the market. In her opinion, the "Old Ghost" is very carefree and walks vigorously. Every day at three o'clock in the morning, the market starts to get busy, with more than 1,000 shops stocking goods, and "Old Ghost" is no exception. In her spare time, Xia Mei often gets together with the neighbors in the market to chat about family affairs, and "old

ghosts" also join in when she is not busy. When chatting with Xia Mei, the "Old Ghost" sometimes mentioned that he was old and sick. The Huanan Seafood Wholesale Market has been closed in the early morning of January 1, 2020 for environmental sanitation improvement. After the market closed, Xia Mei never saw the "old ghost" again. "The old ghost is gone." Two days ago, Xia Mei suddenly heard the news of the death of the "old ghost" from the owners of other shops in the market, which surprised her, "They said that people who are usually hot and hot can leave quickly. "

ightarrow This is likely 69M2, very few deaths announced before Jan 21, mainly 61M 69M2 66M and 48F1

https://weibo.com/1622280654/InCER2EA3?refer\_flag=1001030103\_(video) https://m.sohu.com/a/364280626\_120397113/?pvid=000115\_3w\_a

On January 1, a reporter from the Beijing News connected to Huang Yong (pseudonym), who is currently being treated in isolation in the hospital. He said that dozens of patients are currently being treated together. Huang Yong said that he had been sick for more than ten days and thought it was a cold at first.

#### https://baijiahao.baidu.com/s?id=1659251250749155231&wfr=spider&for=pc

One evening around December 23, I was just about to get off work when a middle-aged male patient came. His symptoms were chest tightness, fever, wheezing and coughing for several days. After examination, I found that his flow A, B and blood routine were all normal, the only thing that went wrong was that the lung CT was positive. I asked him where he lived and what he did. He said he was from Huanggang and worked as a delivery worker at the Huanan Seafood Market. Because the same case appeared in the Huanan Seafood Market at that time, I took it seriously and immediately reported the situation to the hospital leadership. Soon, Jianghan District CDC and Wuhan CDC sent people to do sampling. On that day, the patient wanted to go home after the examination. I saw that he was a little serious and suggested that he be admitted to the hospital for further treatment. Our hospital does not have a separate fever ward, so he was taken to Jinyintan Hospital, a specialized infectious disease hospital in Wuhan. Later, I learned from my colleagues at Jinyintan Hospital that after being diagnosed, he was suffering from pneumonia caused by a new type of coronavirus.

#### http://www.bjnews.com.cn/detail/157793784214461.html

On December 31, when a reporter from the Beijing News visited the Houhu District of Wuhan Central Hospital, the son of a patient said that his father had been treated in Houhu District since his father was diagnosed with pneumonia. Everything is fine." He was about to be discharged from the hospital, but was transferred to another hospital for treatment. He didn't know the exact reason.

On the afternoon of January 1, at the entrance of the infectious disease ward on the fourth floor of Jinyintan Hospital, a reporter from the Beijing News saw that an old man's son and daughter-in-law were arranging for her to be hospitalized. Her daughter-in-law told the Beijing News that the old man was recently diagnosed with pneumonia in Wuhan Union Medical College Hospital, and the symptoms and lung CT were "almost the same as those of patients with pneumonia related to the South China Seafood Market", but the blood test report from Union Medical College Hospital showed that Of the 10 viruses tested, the elderly were not infected. In other words, her mother-in-law was also infected with "unexplained pneumonia". According to the daughter-in-law, her mother-in-law lives in a community not far from the Huanan Seafood Market and will go to the market to buy things on weekdays. After Xiehe Hospital learned about the situation, they immediately asked them to send the old man to Jinyintan Hospital.

On January 1, at the entrance of the ward on the fourth floor of the South, a reporter from the Beijing News met a mother who came to deliver meals to her son. According to her, her son is in his twenties and lives in a community opposite the Huanan Seafood Market, but he has never been to the market to buy things. He started to have a fever on December 30 last year. At first, he took some proprietary Chinese medicines, but his condition kept recurring. , went to Xinhua Hospital not far from home for treatment. "After the doctor over there learned our address, they didn't give a diagnosis. They only said that it was probably a viral cold. Let us come here (Jinyintan Hospital) for observation." The mother said that the doctors at Xinhua Hospital were afraid that her son would be infected. She had the same pneumonia as the patient in the South China Seafood Market, and hoped that Jinyintan Hospital would give a diagnosis, but she was also a little scared, so she sent her son to Jinyintan Hospital the next day.

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### https://archive.md/wgtCY#selection-1817.4-1817.296

Another merchant on the Second Street of West District told the Beijing News that the merchant selling condiments next door was first admitted to Wuhan Central Hospital on December 25, and then transferred to Wuhan Union Hospital. The store is currently being taken care of by family members.

Possibly DRASTIC003, DRASTIC0023 or less likely DRASTIC012 DRASTIC036?

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### https://baijiahao.baidu.com/s?id=1654845412197587426&wfr=spider&for=pc

Another family member, Mr. Xu, who lives on the fourth floor of the South Building of the Inpatient Department of Jinyintan Hospital, introduced that his son went to Huanan Seafood Wholesale Market on December 15, 2019 to buy meat. He started to have a fever on the 25th. Well, after a week of injections, it was finally delivered here. Now family members are not

allowed to visit, and they can only give things to medical staff. I heard that they are in good condition now.

\_\_\_\_

63F who died on Jan 21 - What about this:

## https://page.om.qq.com/page/O0oPNG7ZTSIfbzNFRC5gQq\_A0

This is the woman whose family believe she had been infected when playing Mahjong (or Taishi).

### https://news.sina.com.cn/s/2020-01-23/doc-iihnzahk5878124.shtml

Mr Zhang's 69yo wife died in Central on Jan 21, she was admitted on Jan 10, likely infected when doing taishi. On Jan 19 he became sick as well.

The subtitles seem to say hospitalized around Jan 10 and not linked to the market, though she lived close to it.

https://web.archive.org/web/20210815221941/https://mp.weixin.qq.com/s?src=11&timestamp=1629065822&ver=3255&signature=XG2GkeGvXHyV9IE%2Aq2uKqL-eXup36xDFxePIF4wgP5HzlsN%2A5KIARvzpUgcaNvq3niLACd%2AIAvBIv5YPoi%2AMYLW5YSvjl00d53NgWeAOhO4a0n1sRV7vgDaLzDsrqPtK&new=1

Try to find sichuan daily original  $\rightarrow$  it is <a href="https://v.qq.com/x/page/d3055qz0lz6.html">https://v.qq.com/x/page/d3055qz0lz6.html</a> and <a href="https://weibo.com/p/1005051175356543/home?from=page\_100505\_profile&wvr=6&mod=data&layerid=4463573151273982">https://weibo.com/p/1005051175356543/home?from=page\_100505\_profile&wvr=6&mod=data&layerid=4463573151273982</a> archived at <a href="http://cov2.free.fr/001TQGtMlx07Ambfkmko01041200hBWE0E013.mp4">http://cov2.free.fr/001TQGtMlx07Ambfkmko01041200hBWE0E013.mp4</a>

武汉陈先生母亲因新型冠状病毒感染的肺炎,于21日晚11点去世。陈先生称:母亲63岁无慢性病 史,12月底以为是普通感冒,直到休克才知道严重。家住海鲜市场附近,其老伴目前在隔离。 ("四川日报"微博)

Wuhan Mr. Chen's mother died at 11 pm on the 21st due to pneumonia from the new coronavirus. Mr. Chen said: My mother was 63 years old and had no history of chronic disease. At the end of December, she thought it was a common cold. She didn't know that it was serious until she was shocked. He lives near the seafood market, and his wife is currently in isolation.

### ("Sichuan Daily" Weibo)

http://sa.sogou.com/sgsearch/sgs\_tc\_news.php?req=EqWOYcmCnS-MRiFbuoB2vpCsd-6w7uFW-GiRL0\_4QCw=

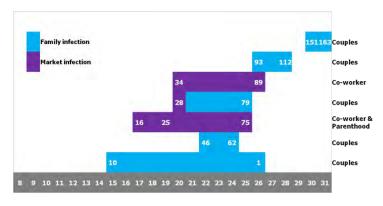
#### - Who is this

#### https://www.sohu.com/a/376047105 113767

On January 29, good news came from Wuhan Tongji Hospital: a 78-year-old patient with new coronavirus infection was discharged! This is the oldest of the critically ill patients in Wuhan. The first patient diagnosed with the new coronavirus was received by Zhao Jianping. "Before coming to Tongji Hospital, the patient had done some tests. The test results at that time suggested that the coronavirus was mutated, but it was impossible to know what kind of coronavirus it was. The patient's condition at the time was that he had difficulty breathing, gasping, and was Immediately arrange hospitalization," Zhao Zhaojianping recalled.

Fig. 15. Cluster outbreaks among the 174 cases.

Among the seven clusters of cases (Fig. 16), there were two clusters with high possibility of market infection, four clusters with high possibility of family infection, and one cluster happened at home due to the introduction from market infection.



Goto pg 157 onwards

## Babar on April 1:

- I found the Wuhan central leaked document subject of several articles in March <u>justpaste.it/8koyw</u>

Confirms the 7 patients are from Houhu district, 4 from emergency department, 3 from respiratory department (as of Dec 29). All market related.

- The patient table is in the Wuhan-Hu-1 preprint <u>biorxiv.org/content/10.110</u>....
- The Wuhan CDC came for sampling the 7 patients. Fits perfectly with the Wuhan&Hubei CDC Dec 30 report <u>justpaste.it/9r4rm</u>

It is plausible that the 7 patients were confirmed as suggested by this sentence in the preprint

"clinical and laboratory data were retrieved from the clinical records of the confirmed patients"

I found on covidforget the missing article on sister Wang: <a href="web.archive.org/web/2021080601">web.archive.org/web/2021080601</a> ..... All the needed details on the 3rd case sequenced in December, 44M1

1

Including name..

## Engineer on April 1:

https://web.archive.org/web/20200105045222/https://news.ifeng.com/c/7syooeta5IT 69M1 onset Dec 12

"Another family member of a patient surnamed Zheng told reporters that her husband, who is 69 years old this year, is also a delivery staff at the hotel. After going to the Huanan Seafood Market to purchase goods, they will be sent to Jingzhou, and they have to pick up the goods every day. "Purchasing seafood from a hotel in Jingzhou that specializes in seafood. There is a special car in Jingzhou, and they will be transported there after purchasing.""

一级响应 - Level 1 Response Series Episodes 1-5

1 https://www.youtube.com/watch?v=mCT2fp7QLIE

- 2 https://www.youtube.com/watch?v=qOAegtF0eMg
- 3 https://www.youtube.com/watch?v=XV0ajeKck-U
- 4 https://www.youtube.com/watch?v=ByCyGzw9J4c
- 5 https://www.youtube.com/watch?v=AkY71JsrGe4